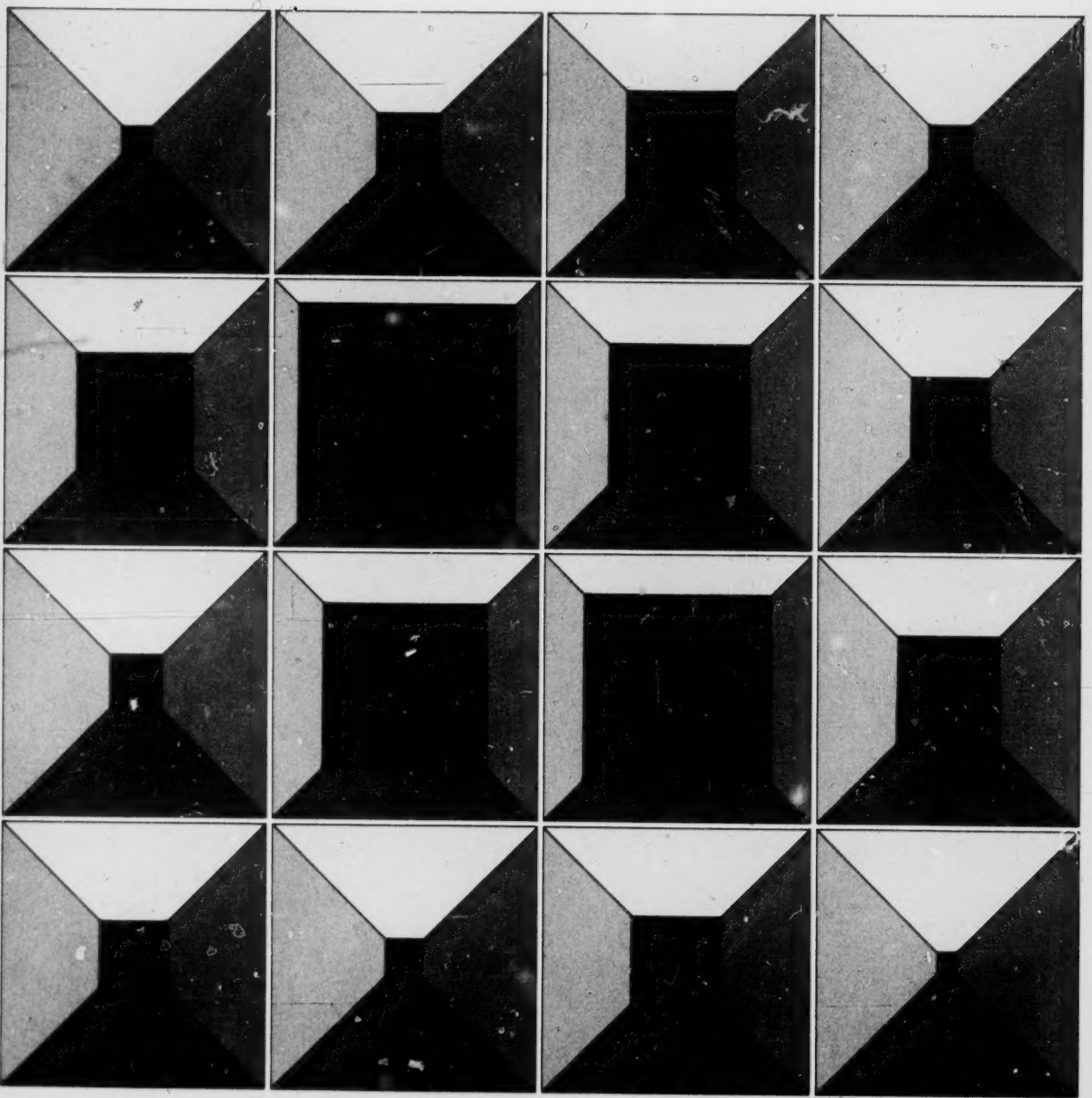
A CBO STUDY

Containing Medical Care Costs Through Market Forces

May 1982

Congress of the United States
Congressional Budget Office



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CONTAINING MEDICAL CARE COSTS THROUGH MARKET FORCES

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Congressional Budget Office

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PREFACE

In response to the problem of rising medical care costs in general, and their effects on the federal budget in particular, some in the Congress have proposed a change in policy that would stress greater reliance on the market to allocate resources to medical care. Its advocates believe that this would foster increased competition among the providers of services.

This report, prepared at the request of the Subcommittee on Health and the Environment of the House Committee on Energy and Commerce, analyzes the potential of this approach. Particular attention is given to options that would alter the tax treatment of employment-based health insurance and options involving the Medicare program. In keeping with CBO's mandate to provide objective and nonpartisan analyses, the study makes no recommendations.

The report was prepared by Paul B. Ginsburg of CBO's Human Resources and Community Development Division, under the general direction of Nancy M. Gordon. Thomas Buchberger contributed the simulations using the National Medical Care Expenditure Survey (NMCES) and John Engberg performed all of the computer analysis. The author is grateful to the National Center for Health Services Research for providing preliminary tapes from NMCES, and to Gail Wilensky and Daniel Walden for assistance in their use. Many individuals provided valuable technical and critical contributions, particularly Brian Biles, Malcolm Curtis, Patricia Drury, Alain Enthoven, Cynthia Gensheimer, Melvin Glasser, Marilyn Moon, Wendell Primus, and Randall Weiss.

Francis Pierce edited the manuscript, and Toni Wright typed the many drafts and prepared the final paper for publication.

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Director

May 1982

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SUMMARY

The costs of medical care have risen steeply in recent years. After adjusting for inflation, per capita spending on personal health services in the United States increased by 124 percent between calendar years 1965 and 1980. Unless current policies change, costs will continue to increase.

These rising costs impinge heavily on the federal budget. On the outlay side, expenditures for Medicare and Medicaid totaled $59.3 billion in fiscal year 1981, and are projected to increase to $133.6 billion by 1987. On the revenue side, the tax exclusion for employer contributions to health benefit plans cost the Treasury $19.8 billion in 1981 and is projected to cost $45.8 billion in 1987.

The Administration and some members of Congress have proposed slowing these cost increases by relying to a greater extent on market forces. This is sometimes called a "pro-competitive" approach because its proponents hope that it would lead to additional competition among the providers of medical care.

MARKET-ORIENTED STRATEGIES

Two distinct market-oriented strategies are available. One would encourage increased cost sharing by users of medical care--that is, it would increase the out-of-pocket amounts that consumers pay for services, in the expectation that fewer services would be used. This in turn would exert downward pressure on prices. A second strategy would encourage people to enroll in alternative delivery systems such as health maintenance organizations (HMOs). HMOs appear to have lower costs than fee-for-service health plans, mainly because their rates of surgery and hospitalization are lower.

Cost Sharing

The impact of the first strategy, cost sharing, on rates of medical care use is well established. Early results from the Rand

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Health Insurance Study showed that families required to pay 25 percent of their bills up to a maximum out-of-pocket amount spent 19 percent less on services than those with full coverage. Comparable results have been obtained in other types of studies. Cost sharing not only reduces the use of medical services; it also reduces prices. Econometric studies have shown that when patients are required to pay more out-of-pocket costs, prices tend to be lower.

Critics of cost sharing are concerned that reduced use of medical services might have serious health consequences, especially for low-income families. They fear that early diagnosis and treatment of illness might be cut back too much, since people would put off seeing their physicians. On the other hand, many feel that there is significant overuse of medical services in the United States; proponents of cost sharing believe that it could be targeted toward economizing on low-priority care. Applying incentives to increase cost sharing to those nonpoor families with the most comprehensive health insurance would minimize the risks to health associated with this strategy.

Cost sharing does not necessarily require that consumers choose among competing health plans, as proposed by many advocates of market-oriented approaches. Increased cost sharing could be brought about by changing the benefit structures of company-wide health plans and of Medicare.

HMOs

Costs in the prepaid group practice type of HMO (PPGP) have been found to be substantially lower than for comparable well-insured populations in the fee-for-service sector. Most analysts believe this is because HMO physicians have incentives to keep use of service low, in contrast to incentives in the fee-for-service system to use services extensively. But some of the cost differences may reflect a tendency of PPGPs to attract relatively healthier patients, or to attract staff physicians whose style of practice is relatively conservative. Also, much of the past research has focused on large successful PPGPs, whereas a rapid expansion of HMO enrollment would depend a great deal on the success of other types of prepaid plans such as individual practice associations (IPAs) whose ability to contain costs is not as well established. A more competitive environment induced by policy changes might induce HMOs to cut their costs more vigorously, however.

In the near term, the HMO strategy would be limited by the small size of present enrollment in those organizations. In 1981, they included only 4.5 percent of the population (although in certain areas, especially major metropolitan areas, the market share was much higher). HMOs have heavy capital and management requirements, so that a rapid increase in their market share in response to a new policy would be unlikely, especially since it would have to come on top of the 12 percent annual enrollment growth expected under present policies.

POLICY OPTIONS

Major ways in which the federal government could bring market forces to bear upon medical costs include:

- Altering the tax treatment of employment-based health insurance;
- Offering Medicare beneficiaries a voucher to purchase a private health plan; and
- Other changes in the Medicare reimbursement and benefit structures.

Each option has the potential to work through both of the strategies outlined above--that is, through increased cost sharing and through increased use of HMOs and other alternative delivery systems. For example, Medicare vouchers could encourage some beneficiaries to obtain a plan with more cost sharing than Medicare, and other beneficiaries to enroll in an HMO.

Alter the Tax Treatment of Employment-Based Health Insurance

Under current law, employer contributions for health benefit plans are excluded from employees' taxable income and from the earnings to which payroll taxes are applied. The revenue loss from this will amount to $25.4 billion in fiscal year 1983.

The tax benefits from this provision are distributed unevenly, varying by income and region. For households with incomes between $10,000 and $15,000 per year, the tax benefit is worth $83

on average, or 0.65 percent of income. In contrast, for households with incomes between $50,000 and $100,000, the tax benefit is worth $622, or 0.98 percent of income. The difference is explained by higher rates of eligibility for employment-based health plans, higher employer contributions for those in firms with higher wage and salary scales, and marginal tax rates that increase with income. Average tax benefits for households residing in the South are 26 percent below the national average of $309. The current tax treatment could be changed in several ways.

Limit the Exclusion. If employer contributions in excess of a certain amount were included in the employee's taxable income, medical care spending would be reduced and federal revenues increased.[1] Most of the impact would come through the cost sharing strategy.

Limiting the special tax treatment of employer contributions would reduce present incentives to shift employee compensation from cash to health insurance, and lead employers to make health insurance benefits less comprehensive. This, in turn, would induce some employees to use fewer medical services, thereby slowing medical care price increases. It might encourage enrollment in HMOs, but only to a limited degree, since HMO premiums often exceed those of the traditional plans with which they compete, and their present market share is small.

If the exclusion was limited to $150 per month for family coverage (and $60 per month for employee-only coverage) in calendar year 1983, and indexed by medical care prices thereafter, employment-based health insurance benefits would be about 13 percent less by calendar year 1987 than if current policies were continued. For the population covered by these plans, spending on insured medical services would be about 9 percent lower.

The exclusion would increase federal revenues by $2.9 billion in fiscal year 1983 and $9.4 billion in 1987. The distribution of the tax increases would mirror that of the tax benefits under current law, but would be more pronounced. For example, almost four-fifths of households would not be affected at all, either because they have no contribution from an employer or because the contribution is below the limit.

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1. Bills containing such limits include H.R. 850, introduced by Congressman Gephardt, and S. 433, introduced by Senator Durenberger.

Opponents of this option object to its heavy dependence on cost sharing and are concerned that it might reduce health care use by those with lower incomes. People who would be affected by the ceiling tend to have above-average incomes, however. Other objections to the option are that it does not focus on the hospital cost problem--most of the increased cost sharing would likely be for nonhospital care--and that a uniform ceiling would have the strongest impact on households in areas with high medical costs.

Permit Tax-Free Rebates. This option would permit employers to pay tax-free rebates to employees choosing a health plan with a premium lower than the employer's maximum contribution. It might or might not be combined with an exclusion limit.[2]

Tax-free rebates would have the advantage, in theory, of altering the incentives in the purchase of health insurance for all those participating in employer-paid plans. In contrast, the exclusion limit would affect only those receiving contributions in excess of the ceiling. Tax-free rebates would reduce federal revenues somewhat, however.

In practice, the impact of this option would be limited by employers' willingness to offer a choice of plans. Employers might resist offering choices because of the risk that their outlays for health benefits might increase. (This could happen if adverse selection among plans led to an increase in average premiums, or if employees covered under their spouses' plans chose to take rebates.) The impact of the option would also be limited by the fact that many employees already pay part of the premiums of their health benefit plans, so that tax-free rebates would not increase their incentives to purchase an optional plan with a lower premium. When combined with an exclusion limit, rebates would not affect more than one-fifth of those participating in employment-based health plans.

Require Multiple Choices. The federal government could require employers wishing to qualify for the tax exclusion to offer choices of plans and to pay rebates to employees choosing

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2. H.R. 850 would combine tax-free rebates with an exclusion limit. S. 139, introduced by Senator Hatch, does not include an exclusion limit.

plans with low premiums.[3] This option would not increase cost sharing to a significant degree, but it might encourage increased HMO enrollment by getting more employers to offer them as options. Regulation would be necessary to ensure that the choices were meaningful, however, and small employers might face significantly more administrative costs.

Offer Medicare Vouchers

Because Medicare plays such an important role in financing health services, changing its provisions would be an important part of any policy to expose health care to market forces. Some members of Congress have proposed offering vouchers to Medicare beneficiaries that they could use to purchase qualified private health plans.[4] Since beneficiaries would be responsible for any amounts by which a plan's premium exceeded the voucher amount, and get cash for amounts by which the plan's premium was lower, they would have stronger incentives than at present to economize on medical care.

If Medicare vouchers were voluntary, as in the proposals made so far, they would increase enrollment in HMOs somewhat, but would have little effect on cost sharing. Vouchers would increase the financial reward to beneficiaries from enrolling in HMOs that have low costs. But cost sharing would not increase much since sellers of traditional insurance would have a difficult time competing with Medicare due to their selling costs and Medicare's hospital discount. It is likely that a relatively small proportion of Medicare beneficiaries would choose to take advantage of a voucher option.

Medicare vouchers could reduce federal outlays significantly only if they were made mandatory for everyone. In that case, they would reduce Medicare outlays by the difference between the

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3. S. 433 would require firms with more than 100 employees to offer a choice of three options, each offered by a separate carrier. The amount of the employer's contribution would have to be the same, regardless of the option chosen.

4. H.R. 850 and H.R. 4666, the latter introduced by Congressman Gradison, include provisions for Medicare vouchers.

voucher amount and the average cost of current benefits. Voluntary vouchers could not achieve significant savings because, to induce much participation, the voucher amount would have to be close to current benefit costs. Federal outlays might actually increase under voluntary vouchers because those using the voucher would tend to have lower claims than the average. The costs of their vouchers to the federal government would thus exceed what their benefits would have cost if they had remained in Medicare.

Change Medicare Reimbursement or Benefit Structures

The role of the market in financing medical services could be increased by other changes in Medicare. For example, modifying the reimbursement of HMOs by Medicare could enable them to achieve enrollment gains similar to those from using vouchers, while avoiding some of the problems mentioned above.[5]

Cost sharing could also be increased in several ways--for example, by applying a tax to the premiums of insurance policies that supplement Medicare, by directly altering the Medicare benefit structure, or by offering a choice of "plans" within Medicare. Unlike the voucher proposal, these options would reduce Medicare outlays substantially. A premium tax of about 35 percent would reduce the federal budget deficit by $2.5 billion in fiscal year 1983 and by $4.7 billion in 1987 through a combination of increased revenues and the reductions in Medicare outlays that would result from some dropping their supplemental policies. Requiring beneficiaries to pay 10 percent of the cost of the current Medicare first-day hospital deductible for the second through thirty-first days of hospital stays would reduce outlays by $1.1 billion in 1983 and $1.9 billion in 1987. Finally, a choice of benefit "plans" could also be offered within Medicare. Those choosing less comprehensive benefits, for example, could be given a rebate.

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5. H.R. 3399, introduced by Congressman Waxman and reported by the Committee on Energy and Commerce, and S. 1509, introduced by Senator Heinz, would have Medicare reimburse HMOs on a per-enrollee basis.

CONCLUSION

Changes in economic incentives can potentially slow the rise in medical costs and reduce federal outlays on medical care. In the short run, the most effective approach would be through the cost-sharing mechanism, though in the long run HMOs might play an increasing role. Some may not regard the magnitude of the effects of market-oriented options to be large enough in the short run, however, especially with regard to hospital costs. Prospective payment of hospitals—a regulatory approach in which third parties set rates for hospital payment in advance--might be considered as a complement to market-oriented options.[6]

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6. For a brief discussion of prospective payment, see Paul B. Ginsburg, "Issues in Medicare Hospital Reimbursement," National Journal, vol. 14 (May 22, 1982), pp. 934-37.

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CHAPTER I. INTRODUCTION

In response to a number of concerns, some in the Congress have proposed a change in federal policy toward medical care that would stress greater reliance on the market. This approach is often labeled "pro-competitive," because one of the results of a shift toward market mechanisms would be increased competition among the providers of medical care.

THE MEDICAL CARE COST PROBLEM

Spending on medical care has increased rapidly since the mid-1960s. For instance, the share of the gross national product (GNP) devoted to medical care increased from 6.0 percent in calendar year 1965 to 9.4 percent in 1980. Per capita spending on personal health services increased from $181 in 1965 to $941 in 1980, an increase of 420 percent, or 124 percent after adjusting for inflation. These increases are projected to continue.

An important component of the increase in medical care spending is increased rates of use of services. The quantity of services per capita more than doubled between 1965 and 1980. Rates of hospitalization have increased somewhat, and, for those hospitalized, use of diagnostic and therapeutic procedures has increased dramatically.[1]

Many regard this substantial shift of resources to medical care from other sectors of the economy as a serious problem. While such shifts among sectors are common in a dynamic economy, the shift toward medical care is different in that it may not reflect the preferences of consumers, either individually or

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1. For evidence on this last point, see Anne A. Scitovsky, "Changes in the Use of Ancillary Services for 'Common' Illness," in Stuart H. Altman and Robert Blendon, editors, Medical Technology: The Culprit Behind Health Care Costs? (U.S. Department of Health, Education, and Welfare, 1979), pp. 39-56.

collectively. As a result of extensive third-party payment, the medical care system may induce consumers to devote more resources to it than they would really like to. Procedures which have only marginal value to the patient's health may often be prescribed only because a third party--a private insurer or government--will bear the cost.

Rising medical care costs have a substantial impact on the federal budget, making movement toward a balanced budget that much more difficult. Federal spending for Medicare and Medicaid totaled $59.3 billion in fiscal year 1981 and, despite the substantial cuts just enacted, the Congressional Budget Office (CBO) projects that it will increase to $133.6 billion in fiscal year 1987, about 12 percent of total federal spending in that year. The revenue loss from the tax exclusion for employer contributions to health insurance--which amounted to $14.5 billion in income taxes and $5.3 billion in payroll taxes in fiscal year 1981--is projected to increase 131 percent by 1987.

The federal government has two broad options to contain health costs--expanding the economic regulation of medical care providers or encouraging a greater role for the market. Some steps were taken during the 1970s to regulate the medical sector. A health planning system was created, for example, to review the appropriateness of hospital capital projects and a number of states began regulating hospital revenues. Federal regulation of hospital revenues was debated extensively in the Congress, but ultimately was defeated.

Many of the most active opponents of further regulation of medical care agreed with the proponents that medical care costs were too high. They turned their attention to the potential of a market-oriented solution to the problem. While they were skeptical about the ability of regulatory tools to contain costs, they thought that competition on the basis of price would have such potential.

MARKET STRATEGIES

Two distinct strategies to increase the role of market forces in medical care are available. One calls for an increase in cost sharing by consumers of medical care. This would require consumers to pay a larger fraction of the prices charged by providers,

with less being paid by insurance plans. As a result, consumers would be induced to use fewer services and become more sensitive to price differences between providers. These changes in consumer behavior would also put downward pressure on medical prices.

A second strategy envisions greater use of prepaid health plans such as health maintenance organizations (HMOs). HMOs are thought to encourage a more economical use of medical services. They may also encourage price competition, since consumers are in a better position to consider price in choosing a health plan that covers a year's services than they are in choosing a provider for a specialized service needed immediately.

The distinction between the two strategies is not always clear-cut. For example, insurance plans might offer policyholders reduced cost sharing if they restrict themselves to a list of preferred medical service providers--providers thought to be relatively low-cost. Proposals such as these combine elements of both strategies.

FEDERAL OPTIONS

Two major policy options that are market-oriented are available to the federal government. They would:

- Alter the tax treatment of employment-based health insurance; or
- Offer vouchers to Medicare beneficiaries permitting them to enroll in private health plans.

Each of these policy options could work through both strategies--that is, each could increase both the number of people choosing insurance policies with substantial cost sharing and the number enrolling in HMOs.

Alter Tax Treatment

The current tax treatment of employer-paid health insurance favors the purchase of more comprehensive policies. Not only are employer contributions to employee health insurance deductible by

the firm for income tax purposes as business expenses and exempt from employer payroll taxes, but they are also excluded from the employees' incomes when federal, state, and local taxes and payroll taxes are assessed. This means that shifting compensation from cash to health insurance contributions reduces employees' tax liabilities, and reduces them by substantial amounts. Average marginal federal tax rates that would apply to such contributions if they were taxed will total 38 percent in calendar year 1983--28 percent for individual income taxes, and 9 percent for the combined employer and employee shares of payroll taxes.

This tax treatment could be altered to reduce the incentive to purchase extensive employment-based health insurance. For example, limiting the amount of the contribution that could be excluded from taxation would end the subsidy for the purchase of insurance in amounts exceeding the limit, while leaving intact the subsidy for purchasing some insurance. Encouraging employers to offer a lower-cost plan as an option, with tax-free rebates to employees choosing such a plan, would encourage some to choose less extensive insurance.

Offer Medicare Vouchers

The second policy option--vouchers for Medicare beneficiaries--would reward those choosing a qualified private plan having lower costs than Medicare. Voucher amounts could be based on per capita Medicare benefits (net of Medicare premiums), adjusted for factors such as the age, sex, and location of the beneficiary. Those paying less than the voucher amount for a health plan meeting certain qualifications would receive the difference in cash. Vouchers could lead to lower medical costs by allowing beneficiaries to choose private plans with more cost sharing than Medicare and by encouraging them to enroll in HMOs or other alternative delivery systems that have lower costs than Medicare.

The Medicare benefit structure could also be changed to encourage increased cost sharing. This could be done either in conjunction with vouchers or as an alternative.

PLAN OF THE PAPER

The paper discusses the potential of these two market strategies, and evaluates the federal policy options in pursuing them.

The remainder of this chapter presents basic background material on the financing of medical care in the United States. It can be skipped by readers familiar with the topic. Chapter II discusses the assumptions underlying the cost sharing and HMO strategies, and reports what the technical literature has to say about their likely success. It also briefly reviews the potential and pitfalls of increased use of consumer choice among health plans, in contrast to the current system characterized by group choice. This issue is discussed more extensively in Appendix A. Chapter III discusses major options in the tax treatment of employment-based health plans. These include limiting the exclusion from taxation, not taxing rebates paid to employees choosing low-cost plans, and requiring employers to offer a choice of plans. Both the medical care system impacts and the revenue impacts are considered. Chapter IV discusses the Medicare voucher option and alternative market-oriented changes in Medicare.

FINANCING MEDICAL CARE IN THE UNITED STATES

The purchase of medical care is distinguished from that of other goods and services by the fact that a party other than the consumer often finances it. About 82 percent of spending for hospital and physician services is financed by third parties.

Of the $99.6 billion spent for hospital care in calendar year 1980, 91 percent was paid by third parties. Of the $46.6 billion spent for physician services, 63 percent was paid by third parties. In contrast, third-party payment plays a much smaller role in the market for drugs and dental services.

Private Health Insurance

Private health insurance, most of it through employers, accounts for somewhat less than half of third-party payment for hospital and physician services. Significant economies of scale in group purchase of health insurance, together with important tax advantages (see Chapter III), have led most medium-sized and larger employers to offer health benefits to their full-time employees as part of the compensation package. Nevertheless, individually purchased health insurance plays a significant role in providing coverage for those not eligible for either employer-

paid health insurance or public programs. About 10 percent of those with private insurance depend entirely on an individually purchased policy.[2]

The health insurance market is a competitive one, although states have conferred advantages on some of the participants. Blue Cross-Blue Shield plans on the one hand, and commercial insurers on the other, have roughly equal shares of this market. Blue Cross and Blue Shield plans were developed by hospitals and physicians respectively, and in many states enjoy tax advantages based on official recognition of their providing a public service such as subsidizing premiums for individually purchased policies. With a few exceptions, the Blue plans define territories and do not compete with each other. Many of the major life insurers have developed health insurance lines and compete with the Blue plans and with each other. Health insurers are regulated at the state level, but regulation of premiums tends to apply only to individually purchased policies.

A rapidly developing trend is toward self-insurance by large employers. These employers pay claims directly for their employees, often using insurance companies only to process the claims. The trend toward self-insurance has little significance for health policy, since the premiums paid by the employers are in any case based on the claims experience of their employees. The motives underlying the trend are to improve cash management and to avoid state taxes on health insurance premiums.

Public Health Insurance

Public third-party payment became significant with the enactment of Medicare and Medicaid in 1965, and now accounts for 45 percent of all spending on hospital and physician services. The Medicare program provides hospital insurance (Medicare Part A) for about 29 million persons eligible for Social Security and railroad retirement who are 65 and older or who are disabled, and for chronic renal disease patients who have Social Security coverage either as workers, spouses, or dependents. Early retirees, survivors, and disabled persons during a two-year waiting period are not eligible for Medicare.

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2. Congressional Budget Office, Profile of Health Care Coverage: The Haves and Have-Nots (March 1979), p. 40.

Medicare Part B, the Supplementary Medical Insurance program, is an optional supplement available to this same population and to all those 65 years and older. It pays, after a $75 per year deductible, 80 percent of the cost of physicians' and other medical services.

Part A is financed by a payroll tax paid half by employees and half by employers, while Part B is financed roughly one-quarter by premiums paid by recipients and the rest through appropriations from general revenues. In fiscal year 1981, Medicare outlays were about $42 billion.

The Medicaid program finances medical care for the needy.[3] State agencies administer Medicaid under federal guidelines, while financial responsibility is shared by federal and state and sometimes by local governments. There is substantial variation from state to state both in the categories of persons covered and in the benefits to which they are entitled.

All recipients of Aid to Families with Dependent Children (AFDC) and virtually all Supplemental Security Income (SSI) recipients are eligible for Medicaid. About 30 states also cover the medically indigent: persons with large medical bills who would have qualified for AFDC or SSI but for their incomes and whose incomes less medical payments fall below state-established levels. About half of Medicaid recipients are under age 21; one-sixth are over 65, in which case Medicaid generally acts as supplemental coverage to Medicare. Large segments of the poor population--poor childless couples, single persons under age 65, the working poor, and intact families--generally do not qualify for Medicaid, however, because they do not qualify for AFDC or SSI. In fiscal year 1981, Medicaid financed medical services to over 22 million persons at a cost of $30 billion, of which 56 percent was paid by the federal government and the rest by state and local governments.

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3. For a more detailed description of Medicaid, see Congressional Budget Office, Medicaid: Choices for 1982 and Beyond (June 1981).

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While the bulk of the population is insured for health services either privately or by the public programs, a significant minority has no coverage at all. Estimates are difficult because of shortcomings of survey data and definitional problems, but between 5 and 8 percent of the population appears not to be covered.[4]

The Medical Care Market

Most medical care is provided on a fee-for-service basis. Many have criticized the practice, because those who prescribe services stand to profit from them and thus have an incentive to overprescribe.

In contrast, Health Maintenance Organizations (HMOs) charge an annual fee that covers all services considered medically necessary by the organization's medical staff. HMOs have been gaining popularity over time. While they serve only 4.5 percent of the population nationally, they play an important role in certain markets.

HMOs combine the role of insurer and provider of services. They often have physicians as owners of the organization or as salaried staff, so that decisions concerning how to provide care are made in conjunction with protecting the patient from the expense of getting sick. While such an organization eliminates the incentive under the fee-for-service system to overprescribe, some critics feel that it may replace this with an incentive to underprescribe.

HMOs have traditionally been group practices (physicians pooling income), but a looser organization called an individual practice association (IPA) has gained popularity. In an IPA, physicians practice independently; often HMO enrollees constitute only a small part of their practice. IPAs differ from traditional physician-insurer relationships in that the physicians agree in advance to subject themselves to stringent utilization controls.

The medical market is one of the least competitive markets in the U.S. economy, at least with regard to price. An important

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4. Congressional Budget Office, Profile of Health Care Coverage.

reason is the extensive use of third-party payment. When someone else is paying all or most of the bill, consumers have little incentive to choose among providers on the basis of price.

Licensing has also played an important role in making the market less competitive. It prevents professionals with less extensive training than physicians from performing relatively simple medical services except under the supervision of licensed physicians. Advertising of medical services has until recently been prohibited by the American Medical Association. Most states have also prohibited insurers from restricting the payment of benefits to those using a panel of preferred medical providers.

Some feel that the medical care market is inherently noncompetitive. A person with a medical complaint has difficulty comparing prices when the complaint has not even been diagnosed. Since an important part of the service purchased is diagnosis and the prescription of treatment, a patient concerned with price is often limited to comparing charges for initial office visits. In case of hospitalization, the patient is initially limited to hospitals where the physician has admitting privileges.[5]

The presence of HMOs may make medical markets more competitive. Premiums for a year of care are much easier to compare than fees for services needed at once. In addition, consumers can exchange information on the merits of HMOs more easily than they can on individual physicians, since there is more overlap in experience.

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5. But evidence is discussed in Chapter II that implies that medical markets can be competitive. It shows that prices may be affected by changes in the extent of third-party payments in a market.

CHAPTER II. MARKET-ORIENTED STRATEGIES

This chapter analyzes the cost-sharing and HMO strategies, assessing their potential for cost containment and their possible drawbacks. In addition, it examines briefly the problems (such as adverse selection) of making increased use of individual choice among health plans. While individual choice is not an essential component of the cost-sharing strategy, many advocates of "pro-competition" envision it replacing uniform health benefits within a firm, a union, or a government program such as Medicare.

THE COST-SHARING STRATEGY

Increased cost sharing--through such means as deductibles and coinsurance--would lower rates of use of medical services, which in turn would lower service prices. Analysts have debated whether a reduction in rates of use would be at the expense of health levels, but the absence of good data prevents an answer to this question.

Reduced Service Use

The fact that cost sharing reduces service use is now firmly established. The conclusion is supported by the results of three types of studies: experiments, "natural" experiments, and the analysis of survey data. Indeed, the best studies of each type give similar estimates of the magnitude of the effect.

The Rand Study. Preliminary results of the Rand Health Insurance Study have recently become available.[1] Randomly selected families in a number of sites were given insurance policies

1. See Joseph P. Newhouse and others, "Some Interim Results from a Controlled Trial of Cost Sharing in Health Insurance," New England Journal of Medicine 25 (December 17, 1981), pp. 1501-07, and the longer version published by the Rand Corporation (R-2847-HHS, January 1982). The results summarized below are those for predicted use.

with different degrees of cost sharing, together with annual payments to ensure that the cost sharing did not make any of the participants worse off than their present insurance.

Those with cost sharing had lower rates of service use. Families with policies requiring them to pay 25 percent of the bill spent about 19 percent less on covered services than comparable families with full coverage.[2]

Cost sharing that was implemented through coinsurance reduced use of both hospital and physician services. Hospital admission rates were 21 percent lower in those families having 25 percent coinsurance. There were, however, no significant differences in spending per hospital stay. Some have speculated that this could be a reflection of hospitalized persons with coinsurance being sicker than those with full coverage, but others point out how little control patients often have over what happens to them in the hospital. Coinsurance's effects on service use for those hospitalized were also reduced substantially by the ceiling on out-of-pocket liability employed in the experiment. Seventy percent of those hospitalized exceeded their limit during their hospital stay. This dilution of cost sharing would be less if higher ceilings were employed.

Spending on ambulatory care such as physician office visits was 20 percent lower in families with 25 percent coinsurance. The reduction in services was concentrated in fewer visits rather than lower prices per visit.

The Stanford Experiment. Similar results for physician services have been obtained in a study of a natural experiment. Stanford University employees receiving care at the Palo Alto Medical Clinic (a large multi-specialty group practice) decided to shift from full coverage to 25 percent coinsurance of physician services (both inpatient and outpatient). According to a careful

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2. Under this 25 percent coinsurance policy, cost sharing by the patient was limited to 5, 10, or 15 percent of income, up to a maximum of $1,000 per year.

study, physician visits declined by 24 percent.[3] A second look at the group four years later showed that the lower visit rate had continued.

Econometric Studies. Numerous econometric studies of the effects of insurance also show that cost sharing reduces rates of use of services. Of those based on household surveys, the one by Newhouse and Phelps is perhaps the most reliable.[4] Going from full coverage to 25 percent coinsurance is estimated to reduce hospital spending by 17 percent.[5] Econometric studies using aggregate (for example, state-level) data have estimated larger effects.[6]

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3. See Anne A. Scitovsky and Nelda McCall, "Coinsurance and the Demand for Physician Services: Four Years Later," Social Security Bulletin 40 (May 1977), pp. 19-27.

4. See J.P. Newhouse and C.E. Phelps, "New Estimates of Price and Income Elasticities of Medical Care Services," in R.N. Rosett, ed., The Role of Health Insurance in the Health Services Sector (National Bureau of Economic Research, 1976), pp. 261-312.

5. CBO calculations based on the results of Newhouse and Phelps.

6. See for example, Martin Feldstein, "Hospital Cost Inflation: A Study of Nonprofit Price Dynamics," American Economic Review, vol. 61 (December 1971), pp. 853-72.

   In a methodological article, Newhouse argues that these results are biased upward, and that high-quality household survey studies are more accurate (Joseph P. Newhouse, Charles E. Phelps, and M. Susan Marquis, "On Having Your Cake and Eating It Too: Econometric Problems in Estimating the Demand for Health Services," Journal of Econometrics, vol. 13 (August 1980), pp. 365-90). But aggregate studies have the advantage of capturing various community effects, as when cost sharing changes the norms of medical practice in an area.

Reduced Medical Prices

Greater cost sharing appears to reduce medical prices as well as service use, although the evidence is less extensive and the results are subject to a larger degree of error.

Cost sharing can reduce prices in two ways. The first is through the normal workings of supply and demand. The second is by making the market more competitive. When differences in out-of-pocket costs are increased, patients become more sensitive to price differences among providers. This means that providers who cut prices will gain more patients, while those who increase prices will lose more.[7]

The evidence on price effects is from econometric studies.[8] Estimates of price effects in hospital care tend to be large, but a significant delay in the working out of the full effect is

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7. For a detailed statement of this phenomenon, see H.E. Frech III and P.B. Ginsburg, Public Insurance in Private Medical Markets: Some Problems of National Health Insurance (American Enterprise Institute for Public Policy Research, 1978).

   Some empirical support for this notion comes from Newhouse and Phelps, "New Estimates." Those survey respondents with more cost sharing tended to pay lower prices for hospital and physician services.

8. See, for example, David Salkever, "A Microeconomic Study of Hospital Cost Inflation," Journal of Political Economy, vol. 80 (November/December 1972), pp. 1144-66; Martin Feldstein, "Hospital Cost Inflation"; Karen Davis, "The Role of Technology, Demand and Labor Markets in the Determination of Hospital Cost," in Mark Perlman, ed., The Economics of Health and Medical Care (Wiley, 1974), pp. 283-301; and Joseph Newhouse, "The Structure of Health Insurance and the Erosion of Competition in the Medical Marketplace," in Warren Greenberg, ed., Competition in the Health Care Sector: Past, Present, and Future (Federal Trade Commission, March 1978), pp. 270-87.

observed, and some of the measured price effect is really an additional quantity change. Since price data are often hard to come by, many of the hospital studies use cost per patient day as a proxy for price. Clearly some of the effects of cost sharing reflect changes in the intensity of services per patient day, an aspect of quantity. In physician studies, price data that do not include a quantity component are more readily available (the customary fee for a routine office visit, for example), and the literature indicates sensitivity to insurance coverage. A measure combining service intensity and price (average revenues per visit) shows even larger effects of cost sharing.[9]

Effects on Health Status

Many are concerned about the effect of the reduced services associated with cost sharing on health status, particularly with respect to low-income families. Are the reduced services mainly those with little value to health or are they important ones? Unfortunately, not enough results are available to form a judgment on this issue.

Those who feel that significant effects on health status are not involved point to evidence of extensive variations in hospital and surgery use from area to area and, in particular, high rates in the United States relative to other developed countries such as Great Britain. They have confidence that physicians will advise patients concerned with out-of-pocket costs to forgo those services with the lowest value to health. They are reassured by a preliminary result from the Rand experiment, suggesting that the lower rates of hospital and physician use by those with coinsurance were to be explained by a higher proportion of episodes of illness in which no services were sought rather than by fewer

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9. See Frank A. Sloan, "Effects of Health Insurance on Physicians' Fees," paper presented at the Annual Meeting of the Southern Economic Association, Washington, D. C., November 6, 1980, and Frank A. Sloan, "Physician Fee Inflation: Evidence from the Late 1960s" in Rosett, Role of Health Insurance, pp. 321-53.

services per treated episode.[10] Some observers have speculated that the episodes not treated tended to be minor, self-limiting illnesses, but results from the Rand study as to the effects on health status are still some time off.[11]

Those who are concerned that significant health effects would result from cost sharing raise the issues of early diagnosis and treatment of illness and the particular problems faced by the poor. While physicians are in a good position to advise on the best way to lower use, individuals may not make the right decision as to when to contact physicians--perhaps delaying until a health problem that could be corrected easily has become a more serious one. Those whose incomes are low may simply not have the funds to pay for services that physicians feel are important. For the cost sharing strategy to avoid the risk of impairing the health of those with low incomes, it would have to focus on those who are better off. This might involve taxing employer contributions to health benefit plans only to the extent that they exceed a limit (see Chapter III), or restricting increases in Medicare cost sharing to those who have relatively high incomes (see Chapter IV).

THE HMO STRATEGY

Increased enrollment in HMOs would lower spending on medical care through lower rates of use of hospital services by those persons who leave the fee-for-service (FFS) component of the medical care system, but the number of potential transfers is

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10. These results are based on only three site-years and are subject to change when the data base is expanded. See Emmett Keeler et al., "The Demand for Episodes of Medical Services: Interim Results from the Health Insurance Study," paper presented at the Annual Meeting of the Association of Public Policy Analysis and Management, Washington, D. C., October 1981.

11. When available, results from the Rand experiment should significantly increase knowledge about these effects. Sophisticated measures of health status have been developed, and careful measurements have been taken over time on a large sample of the participants.

limited in the short run by capacity constraints. The notion of some that increased HMO enrollment would reduce costs in the FFS system through competitive pressure is not at this point supported by data.

Lower Costs per Enrollee

An extensive literature supports the conclusion that per enrollee costs are lower in HMOs that are prepaid group practices (PPGPs), largely because of lower rates of surgery and of hospitalization. A number of factors suggest caution, however, in projecting similar rates of savings for a substantial expansion of enrollment.

In an exhaustive review of the HMO experience to date, one analyst concludes that;

> the total cost of medical care (premiums plus out of pocket costs) for HMO enrollees is lower than for comparable people with conventional insurance coverage. The lower costs are clearest for enrollees in prepaid group practices, where total costs range from 10 to 40 percent below costs for conventional insurance enrollees.[12]

Most analysts attribute these results to the incentives for HMO physicians to keep costs down. In contrast to the FFS system, where more services mean higher incomes for physicians, HMO physicians earn more when fewer services are used. Physician incentives to prescribe less care appear to outweigh patient incentives to use more. As one might expect, the lower rates of use are confined to inpatient care, which is prescribed by physicians--whereas use of outpatient care, which is more under patient control, is somewhat higher.

A number of factors lead one to be cautious in projecting the results of an increase in HMO enrollment from this experience. First, some of the cost difference could reflect a tendency of

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12. Harold S. Luft, "Assessing the Evidence on HMO Performance," Milbank Memorial Fund Quarterly: Health and Society, vol. 58 (Fall 1980), p. 508.

HMOs to enroll persons less prone to use medical services. All HMO patients have chosen their plan over a traditional health insurance plan, but as a group they may differ from those who instead chose the traditional plans.

Knowledge about the selection process is scanty at present, but it appears that those joining PPGPs tend to be low users relative to those in traditional plans, while those joining IPAs with high premiums tend to be relatively high users.[13] In mature HMOs, which tend to have stable enrollments, these tendencies may account for very little, since differences between those who chose the HMO and those who did not would tend to erode over time. Indeed, an analysis of survey data from large SMSAs in California indicated that PPGP enrollees were in somewhat poorer health than those with other private health coverage.[14]

Second, the experience studied to date has been highly varied. Luft's reporting of costs as 10 to 40 percent lower rather than 25 percent lower (the mean of the range) emphasizes the extensive variation from one organization to another, as well as the lack of precision in each study's results. Would enrollment growth tend to be in organizations closest to the 10 percent end of the range or closest to the 40 percent end? On the other hand, the established HMOs that have been studied so extensively have not been subject to much competitive pressure, so that future performance under a more competitive health system could be better than past experience.

Third, most of the research has focused on the experience of large, successful PPGPs such as the various Kaiser Foundation plans. But other forms of HMOs such as Individual Practice Associations (IPAs) may not be as successful. According to Luft:

> Although the evidence is scanty, costs for enrollees in individual practice associations appear no lower than for enrollees in conventional plans.(p. 508)

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13. These results are discussed in more detail in the Appendix.

14. Mark S. Blumberg, "Health Status and Health Care Use by Type of Private Health Coverage," Milbank Memorial Fund Quarterly: Health and Society, vol. 58 (Fall 1980), pp. 633-55.

Rapid increases in HMO enrollment would be more difficult without IPA growth, the potential of which depends on their ability to reduce costs.

A final caveat concerns the possibility that some of the savings achieved by PPGPs could reflect the effects of group practice rather than of prepayment. A recent study found that Stanford University employees enrolled on a prepaid basis in a large fee-for-service group practice that was not at risk for hospital expenses had rates of use strikingly similar to those employees enrolled in Kaiser.[15] The author suggests that the conservative use of services in the fee-for-service group practice was due to control over the supply of physicians exercised by the group. This implies that the conversion of physician groups from fee-for-service to prepayment (HMO) would not have large effects on medical costs.

Limits to Rapid Growth

Policy changes to speed the development of HMOs would not greatly affect the proportion of the population served by these organizations in the near term. One reason is that HMO enrollment is expected to grow rapidly (in percentage terms) under current policies. Any policy-induced growth must come on top of the 12 percent per year that is now projected.

Second, because HMOs have such a small market share today, their market share late in this decade would still be small, even with an acceleration in growth. Under current policies, the 4.5 percent market share in 1981 would increase to 11 percent by 1990. An increase in the annual growth rate to 20 percent, beginning in 1984, would increase the 1990 market share to only 17 percent.

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15. Anne A. Scitovsky, "The Use of Medical Services Under Prepaid and Fee-for-Service Group Practice," Social Science and Medicine, 15C (1981), pp. 107-16. Prepaid plans were a minor part of the practice of this group, and most of the physicians were not aware of whether a patient was prepaid or fee-for-service.

The third factor limiting enrollment gains is management requirements. HMOs tend to be complex organizations that are difficult to manage well. As a result, growth must be carefully planned and proceed in an orderly fashion to prevent serious losses in efficiency. Rapid growth of the industry would require the entry of many new HMOs, dependent on the availability of entrepreneurial talent and of venture or philanthropic capital. The federal government has provided grants for start-up expenses, but funding for that program has been terminated. Some major health insurers are said to be positioning themselves to enter the HMO business in a significant way.

Effects on the Fee-for-Service System

Whether increased enrollment in HMOs would lower medical care costs in the FFS sector is an open question. The experience with HMOs that have a substantial market share is so limited that inference is extremely difficult.

Some argue that increased enrollment in HMOs would affect both insurers and FFS providers, causing both to change their behavior. Insurers, when faced with decreased sales of policies, might develop HMOs themselves, or innovative plans such as those that limit choice of provider. Alternatively, they might focus their sales efforts on traditional plans with more cost sharing.

Providers might respond to competition by practicing less costly medicine, and in that event reduced demand for their services could cause prices to decline. For example, primary care physicians, whose services tend not to be completely paid for by insurance, might order fewer services in order to keep their patients' annual costs more in line with HMO premiums.

On the other hand, some factors could limit the magnitude of such a competitive response, or even cause it to work in the other direction, as long as the level of third-party payment in the FFS system remains high. Those providers that derive almost all of their revenues from third-party payment, such as hospitals and surgeons, would have little incentive to compete. When services are fully insured, individual providers do not gain increased business by cutting prices or prescribing services more judiciously. Indeed, they might react to lower demand for their services

by inducing increased rates of use among their remaining patients. A 10 percent increase in the surgeon-to-population ratio in the FFS sector could increase surgery rates by 3 percent, for example, and a 10 percent increase in the hospital bed-to-population ratio could increase days of care by 4 percent.[16] Such responses would tend to be self-limiting, however, as they would increase incentives for consumers to shift to HMOs.

Empirical studies of the effects of HMOs on the FFS sector do not, at this point, support the hypothesis of reduction in per capita medical costs or hospital use. Some have identified a slowing of medical care cost increases or reductions in hospital use in areas that have experienced growth in HMO enrollment. But a recent study of three of these areas--Minneapolis-St. Paul, Hawaii, and Rochester, New York--has raised doubts about the linkage between HMO growth and cost reduction by suggesting alternative explanations.[17]

THE NEED FOR INDIVIDUAL CHOICE

Many proponents of increased use of the market in medical care envision a process of "fair economic competition" through which consumers would make choices among health plans.[18] Employers contributing to health plans, and Medicare (through a voucher program), would pay the same amount regardless of the plan selected, so that individuals would be rewarded for selecting plans with low premiums.

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16. The surgery estimate is from Victor R. Fuchs, "The Supply of Surgeons and the Demand for Operations," Journal of Human Resources, vol. 13, Supplement (1978), pp. 35-56. The hospital estimate is from Paul B. Ginsburg and Daniel M. Koretz, "Bed Availability and Hospital Utilization: Estimates of the 'Roemer Effect'," Health Care Financing Review, in press.

17. Harold Luft, presentation to National Health Policy Forum, Washington, D. C., November 1981.

18. See for example, Alain C. Enthoven, Health Plan (Addison-Wesley, 1980).

The HMO strategy clearly requires increased use of such individual choice mechanisms, but the cost-sharing strategy does not. Employers could increase cost sharing by changing the provisions of their single health benefits plan and shifting compensation to cash or other fringe benefits, and the Medicare benefit structure could be changed to increase cost sharing.

While individual choice has the potential to stimulate competition among health plans, a number of problems could seriously impair its effectiveness. These include:

- o Adverse and preferred-risk selection;
- o Administrative costs; and
- o Contract complexity.

These problems tend to be most severe when the choice is between plans with different degrees of cost sharing. The Appendix reviews the issues in more detail.

Adverse and Preferred-Risk Selection

When persons choose among health plans, the result is unlikely to approximate that of a random sorting. Consumers are likely to take into account their expected rate of use of services when choosing a plan, while insurers are likely to focus their efforts on persons who are expected to be low users of services. The former process is often referred to as adverse selection, while the latter is called preferred-risk selection, both terms reflecting the perspective of insurers.

Such selection results in a shift of resources from those expecting to be high users to those expecting to be low users. Persons choosing plans comprised of those who use less than average medical care gain from a low premium reflecting that pattern of use, while those choosing the alternative plan lose by paying a higher premium than otherwise (see Appendix Table 1).

In situations where the choice is between a traditional insurance plan and an HMO, adverse selection is a different phenomenon, since the benefit structures often differ less.

Selection is more likely to be dominated by the differences between persons willing to change their physicians and those who are not, since enrolling in a PPGP-model HMO generally requires such a change. But those willing to change tend to be relatively low users. Once the PPGP enrollments have stabilized, the phenomenon may decay--that is, it is probably more important for new PPGPs than for established ones.

Many consider adverse selection undesirable because of these transfers, but others feel differently. The former group champions the current internal subsidy of high users by low users as socially useful, spreading the burden of high medical costs among a larger population. The internal subsidy represents a type of insurance against chronic poor health, a spreading of risks that are long-term as well as those occurring during the policy year. Others object to internal subsidies that are not directly a result of government policy, maintaining that only through explicit government action should resources be directly transferred from one individual to another.

Preferred-risk selection has effects that are very similar to those of adverse selection. In marketing to consumers thought to be the lowest users, insurers segment the market in the same way that adverse selection does, so that the internal subsidy between high and low users is reduced. The opportunities for preferred-risk selection that could arise when individual choice of plans is permitted could lead insurers to channel their energies into marketing schemes designed to select good risks rather than into reducing the cost of medical care.

Adverse selection and preferred-risk selection in health plans would be present under any scheme of individual choice. Their magnitude is difficult to estimate, however, since there has been only limited experience with individual choice, and methods of limiting selection have, for the most part, not been employed.

The Federal Employees Health Benefits Program (FEHBP) exhibits adverse selection, but not to a degree to make individual choice untenable (see the Appendix). It is difficult to generalize from this example, however, since the program deviates from the consumer choice model in some important respects. Also much depends on the experience of consumers in making their choices. As they become more competent in comparing plans, they are more likely to take into account their expected service use.

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Administrative Costs

Systems permitting consumers to choose among health plans are bound to have higher administrative costs, but the costs would vary substantially according to the approach used. For example, if an employer has its regular insurer offer a low-option plan or offers an HMO, administrative costs will probably be very small, at least if the firm is large. FEHBP has low administrative costs despite a relatively large number of plans available to each employee. But in a less structured situation, selling insurance to employees could be very expensive. Administrative costs for individual policies are on the order of 35 percent of premiums, as compared to less than 5 percent for very large group policies and 10 percent for all group insurance. The more "open" the competition among insurers, the higher the administrative costs are likely to be. In assessing the merits of greater use of individual choice, the additional administrative costs must be subtracted from the gains in medical care efficiency.

Contract Complexity

Insurance contracts tend to be complex documents. Group insurance relieves purchasers of some of the burden of studying their health insurance contracts because a professional does the buying.

Under individual choice, the purchaser must have a greater understanding of the plans. If intelligent choices are not made, individual choice loses its value as a means of stimulating competition.

As in the case of administrative costs, a highly structured organization of choice can avoid an important part of the problem. To the extent that the employer or union standardizes benefits so that HMOs and high-option plans have the same benefits, and high- and low-option plans differ only in the size of the deduction or coinsurance, complexity would not be a problem.

CHAPTER III. OPTIONS IN THE TAX TREATMENT OF EMPLOYMENT-BASED HEALTH INSURANCE

The federal government could foster increased use of the market in medical care by changing the tax treatment of health insurance provided through employment. Current policy subsidizes the purchase of health insurance through employment by excluding employer contributions from the taxable incomes of employers and employees. Limiting the subsidy could spur a reduction in the comprehensiveness of insurance without reducing the number of persons covered. This would cause both consumers and providers of medical care to be more conscious of its costs.

This chapter reviews three options for changing the tax treatment of employment-based health insurance:

- Place a ceiling on the exclusion of employer payments from employees' taxable income;
- Permit tax-free rebates by employers to employees choosing low-cost plans; and
- Require employers to offer a choice of plans.

These options could be adopted either singly or in combination.

BACKGROUND

Under current law, employer contributions for employees' health insurance are excluded from employees' taxable incomes. They also are excluded from the earnings on which both employers and employees pay payroll taxes.

With rising medical care costs and increased use of health insurance to finance them, the effect of this exclusion on revenues has become very large. Without the exclusion, the federal government would receive $16.5 billion more in income tax revenue

and $6.5 billion in payroll tax revenue during the current fiscal year (see Table 1). In 1970, these revenue losses totalled only $2.4 billion and $0.8 billion respectively. By 1987, they will increase to $31.1 billion and $14.7 billion.

TABLE 1. ESTIMATES OF REVENUE LOSS FROM EXCLUSION FROM EMPLOYEES' TAXABLE INCOME OF EMPLOYER CONTRIBUTIONS TO HEALTH INSURANCE, BY FISCAL YEAR (In billions of dollars)

	1970	1975	1981	1982	1983	1987
Income Tax	2.4	5.0	14.5	16.5	18.1	31.1
Payroll Tax	0.8	1.9	5.3	6.5	7.6	14.7
Total	3.2	6.9	19.8	23.0	25.7	45.8

SOURCE: CBO calculations based on data from Health Care Financing Administration and the National Medical Care Expenditure Survey.

The tax benefits from this provision are distributed unevenly (see Table 2). The average tax benefit for all households with incomes between $10,000 and $15,000 per year is $83, while that for all households with incomes between $50,001 and $100,000 is $622. As a percentage of household income, the tax benefits are 0.65 percent and 0.98 percent, respectively. This uneven pattern combines several uneven distributions: higher-income households are more likely to receive an employer contribution; they tend to receive a larger contribution; and they are likely to get a larger tax benefit per dollar of contribution.

About 48 percent of households receive no employer contribution and thus no tax benefits from this provision. Some of these households receive federal assistance through Medicare, Medicaid, or programs for military retirees and dependents, but 26 percent of all households receive neither assistance from these programs nor a federally subsidized employer contribution.

TABLE 2. EMPLOYER CONTRIBUTIONS TO HEALTH BENEFIT PLANS AND EMPLOYEE TAX BENEFITS, BY HOUSEHOLD, CALENDAR YEAR 1983 (In dollars)

	All Households				Households Receiving Contributions		
	Percent of Households in Category	Average Employer Contribution	Tax Benefit[a] Per Household	Tax Benefit[a] Percent of Income	Percent Receiving Employer Contribution	Average Employer Contribution	Average Tax Benefit[a]
By Annual Household Income:[b]							
$0-10,000	19	86	17	0.36	13	636	129
10,001-15,000	10	301	83	0.65	31	972	269
15,001-20,000	10	482	143	0.81	47	1,029	307
20,001-30,000	19	817	273	1.08	59	1,375	460
30,001-50,000	25	1,319	501	1.30	73	1,798	683
50,001-100,000	14	1,471	622	0.98	73	2,025	857
Over 100,000	4	1,092	550	0.39	62	1,761	886
By Age of Head:							
Under 45	50	969	362	1.13	60	1,617	606
45-64	31	1,043	398	1.00	60	1,730	661
65 or over	20	113	37	0.12	20	568	185
By Region:							
Northeast	21	901	340	0.95	53	1,686	639
North Central	28	1,015	381	1.09	57	1,766	633
South	31	622	230	0.70	50	1,250	462
West	20	776	297	0.85	47	1,652	633
All Households	100	823	309	0.89	52	1,578	594

SOURCE: CBO simulations based on the National Medical Care Expenditure Survey.

a. Tax benefits include both federal income tax reductions and the employer's and employee's share of federal payroll taxes. About three-quarters of the tax benefits are income tax reductions. State and local income tax reductions are excluded. The estimates assume that taxable excess contributions are made ineligible for the medical expense deduction.

b. Household income before taxes but including cash transfer payments, such as Social Security benefits, projected to calendar year 1983.

Persons not receiving any tax benefit tend to have lower incomes than others. Only 31 percent of households with incomes between $10,001 and $15,000 per year receive a tax benefit from the exclusion, while 73 percent of households with incomes between $50,001 and $100,000 receive a benefit. When those households receiving other federal assistance are excluded, the respective percentages receiving tax benefits are 44 and 77.

Among households benefiting from the provision, the tax benefit tends to increase with income. The average employer contribution for a household with income between $10,001 and $15,000 per year is $972, while that for a household with income between $50,001 and $100,000 per year is $2,025. The marginal tax rates applicable to such contributions are 28 percent and 42 percent respectively, so that the tax benefits are $269 and $857.

Two factors are responsible for the uneven distribution of tax benefits. First, firms whose employees have high average earnings are more likely to have a health plan, and when they do, they tend to make larger contributions. In calendar year 1977, for example, among firms with average hourly earnings between $4.01 and $5.00, 45 percent had health plans, with annual contributions to health, life, and accident plans averaging $169 per employee, while among firms with hourly earnings between $8.01 and $10.00, 72 percent had plans, with annual contributions averaging $435 per employee.[1] Second, employees in higher marginal tax brackets get larger tax benefits per dollar of excludable income.

The tax benefits also vary by region. Households in the North Central region had the highest average tax benefits, while households in the South had the lowest. When income is held constant, the differences remain.[2]

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1. CBO analysis of 1977 Expenditures for Employee Compensation Survey, U.S. Department of Labor.

2. Household tax benefits were regressed on binary variables for age, income, and region, defined for the intervals shown in Table 2. With West the omitted category, the coefficient for North Central is 60 and that for South is -64.

Additional insight into the pattern of tax benefits is obtained by focusing on employment and the size of employer contributions (see Table 3).[3] Contributions vary by whether the firm has a union, by industry, and by size of establishment.

Employees in firms with unions have much larger employer contributions than others. These employees are more likely to have a plan (99 percent versus 87 percent) and receive higher contributions where there is a plan. These differences reflect both possible higher compensation associated with collective bargaining and a tendency for unions to shift the make-up of compensation packages toward fringe benefits.[4]

PLACE A CEILING ON THE EXCLUSION

A number of proposals would place a dollar limit on the amount of employer contributions for health insurance that could be excluded from taxable income.[5] Limiting the exclusion would

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3. In focusing on employment, the unit of observation used here is the employee rather than the household. Since household income is not available on the survey from which information on employers is obtained, this discussion is conducted in terms of employer contributions rather than tax benefits.

4. On the subject of the effect of unions on compensation, the classic work is H. G. Lewis, Unionism and Relative Wages in the United States: An Empirical Inquiry (University of Chicago Press, 1963). For a review of the more recent literature, see C. J. Parseley, "Labor Union Effects on Wage Gains: A Survey of Recent Literature," Journal of Economic Literature, vol. 18 (March 1980), pp. 1-31.

   For a study of unionism and the proportion of compensation allocated to fringe benefits, see William T. Alpert, "An Economic Analysis of the Determinants of Private Wage Supplements," Ph.D. dissertation, Columbia University (1979).

5. Bills introduced in the 97th Congress that would do this include S. 433 (Senator Durenberger) and H.R. 850 (Representative Gephardt).

TABLE 3. EMPLOYER CONTRIBUTIONS TO HEALTH BENEFIT PLANS, 1977-78, BY TYPE OF FIRM, PRIVATE NONFARM SECTOR

	Percent of Employees in Firms with Group Plans[a]	Amount of Employer Contribution in Firms with Group Plans, Relative to Private Nonfarm Average[b]
Union Status		
Union	99	1.23
Nonunion	87	0.89
Industry[c]		
Construction	66	0.74
Manufacturing	98	1.01
Transportation and other utilities	91	1.49
Wholesale Trade	91	0.95
Retail Trade	71	0.93
Finance, Insurance, and Real Estate	93	0.90
Services	90	0.95
Establishment Size		
2-9	56	1.00
10-99	89	0.98
100-999	100	1.00
1,000 and over	100	1.05
Total Private Nonfarm Sector	89	1.00

SOURCE: Employment-Related Health Benefits in Private Nonfarm Business Establishments in the United States, a survey conducted for the Department of Labor by Battelle Human Affairs Research Centers. The second column was calculated by CBO.

a. This does not correspond to the percent of employees covered by group plans. Some employees in firms with plans do not participate. Some in firms without plans are covered through a spouse's employment.

b. The contribution is for the firm's most common plan. All contributions have been divided by the survey average.

c. Mining was omitted because of small sample size.

reduce the comprehensiveness of health insurance benefits, with the reduction focused on those with the most comprehensive benefits at present. This, in turn, would reduce spending on medical care. In addition, it would increase revenues.

Medical Care Impact

Limiting the tax exclusion would affect spending for medical care by removing the subsidy to the last dollars spent on health insurance in excess of the limit. For example, if the limit was $150 per month for family coverage and $60 per month for individual coverage in 1983, purchases of health insurance with employer contributions in excess of these limits would no longer be subsidized through the tax system. For a family in the 40 percent tax bracket, with a contribution of $150 per month, an extra dollar of health insurance would now cost a dollar of after-tax income, instead of 60 cents under current law. Amounts up to these limits would continue to be subsidized, however, so that such a policy would not encourage anyone to drop coverage altogether. Incentives to reduce the comprehensiveness of coverage would be focused on those with the highest contributions, and those with the highest taxable incomes.

Employers and unions with contributions over the limit would react in one of three ways. Some would adjust their compensation package by reducing their contributions to health benefits and increasing cash wages or other fringes instead. Benefits in the single health plan would be reduced to bring the premium down to the exclusion limit. Other employers would give employees a choice of health plans, with at least one of the options having a premium below the limit. Those employees choosing plans costing less than the employer's contribution would get a rebate based upon the difference. Still other employers, at least initially, would not make any changes in response to the limit; in that case, their employees would be taxed on the amount over the limit.

At least initially, most of the response to the incentives associated with limiting the exclusion would involve increased cost sharing in traditional insurance plans rather than increased enrollment in alternative delivery systems such as HMOs. Perhaps the most important reason for this outcome is the current small market share of HMOs, and the barriers to a major increase in their rapid growth under current policies (see Chapter II). Also,

the present tax subsidy to health insurance does not put high-premium HMOs at a disadvantage, so that limiting the tax exclusion would make only some of them more attractive. While HMOs often have lower overall costs than insured fee-for-service medicine, their premiums are often higher than those for the traditional health insurance plans with which they compete.[6] In 1981, for example, the average HMO premium for family coverage was $132 per month, compared to an average of $104 for all employment-based insurance.[7]

Some advocates of this proposal expect that limiting the tax exclusion would lead many to develop potentially less costly delivery systems such as primary care networks or preferred provider organizations. While their logic is correct, the practical outcome is less certain. Given the limited presence of such alternative systems in the health sector today, one must ask whether they are close enough to being economically viable so that a change in tax incentives would make a big difference. While new alternative delivery systems may be just around the corner, confident predictions to that effect have little empirical basis.[8]

The increase in cost sharing that would result from a tax exclusion limit would be significant, however. This is because decisions on the extensiveness of health insurance benefits are strictly financial ones--they do not directly involve choice of physicians for example. Less extensive insurance just means that a greater proportion of medical care is paid for at the time of

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6. The higher premiums are due to less cost sharing and a wider array of covered services.

7. The average HMO premium is from U.S. Department of Health and Human Services, National HMO Census, 1981. The premium for all employment-based insurance is from CBO analysis of the National Medical Care Expenditure Survey.

8. Another issue is whether successful alternative delivery systems would lower overall medical care costs. While a successful preferred provider plan would save money for its subscribers, system savings would require those providers outside of the plan to change their style of practice or lower their prices.

service instead of through regular premiums. Such a relatively focused financial decision is likely to be sensitive to large tax incentives.

While the timing is difficult to predict, by calendar year 1987 the tax exclusion limit described above might be expected to reduce employment-based health insurance premiums by about 13 percent relative to current policies. The decline would be concentrated among those with the highest employer contributions; no change would occur among those with contributions below the limit.[9]

For the population with employment-based health insurance, spending on insured medical care services would be about 9 percent lower in 1987 than under current policies. Much of the reduction would come from a 7 percent reduction in service use, but since employment-based health insurance accounts for only about one-third of national spending on hospital and physician services (and a lower proportion for other services), the percentage reduction for the nation would be substantially smaller. Medical care prices would be about 2 percent lower in 1987 than under current policies, but the reduction would continue to grow in later years.

In percentage terms, hospital care would be affected less than other medical services because of the likely pattern in which reductions in insurance benefits would take place. Hospital care is the most attractive of all medical services to insure--because the financial risks that can be insured are the largest and the administrative costs are the lowest. Those cutting back insurance benefits in response to the changed incentives would be likely to reduce coverage for other services--such as outpatient physician services, mental health services, and dental services--more extensively than they would cut coverage for hospital care.

Revenue Effects

A tax exclusion limit would increase federal revenues by a significant amount, with the tax burden concentrated on those who

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9. The decline would be greater if tax-free rebates were added to this option, but would be smaller if existing contributions were "grandfathered." See the discussion of these variations below.

are benefiting the most from the present exclusion. Limiting the exclusion to $150 per month for family coverage and $60 per month for individual coverage in calendar year 1983, and indexing it thereafter by the medical care component of the Consumer Price Index (CPI), would increase federal revenues by $2.9 billion in fiscal year 1983 and $9.4 billion in 1987 (see Table 4). Of this amount, about three-quarters would be income tax revenue while the remainder would go to the Social Security trust funds. On a calendar year basis, the additional taxes would amount to $55 per household, or for those 17 million households affected, $257 (see Table 5).

Revenues from this proposal would be very sensitive to the exclusion limits chosen. For example, if the limits were 10 percent lower--$135 and $54 per month, respectively--the 1983 revenue increase would be $3.7 billion, or 27 percent larger.

The distribution of tax increases would mirror that of tax benefits from the present exclusion (see pp. 26-29), but the fact that the impact of the change would be concentrated on those with contributions above the limit would make the distribution more uneven. For example, the 79 percent of households with either no contributions or the lowest contributions would not be affected at all (see Table 5). Only 9 percent of those households with incomes between $10,001 and $15,000 would be affected by the cap, compared to 36 percent of households with incomes between $50,001 and $100,000. Those unaffected by the cap would be more likely to reside in the South.

The impact on households' tax bills would vary with income. For all households with incomes between $10,001 and $15,000, the average additional tax payment would be $14 in 1983, or 0.11 percent of income, while households with incomes between $50,001 and $100,000 would pay $116 in 1983, or 0.18 percent of income. When additional income taxes are compared to total income taxes under current law, the ratio is roughly constant over most of the income range, rising from 0.8 percent in the lowest income class to 1.3 percent for the $30,001 to $50,000 class, and then declining. This indicates that such a tax increase would be roughly comparable in progressivity to the rest of the income tax system.[10]

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10. Alain Enthoven has suggested a modification of the exclusion limit to increase its progressivity. All employer contributions could be taxed, and a tax credit equal to the average marginal tax rate granted for all contributions up to the limit. Personal communication.

TABLE 4. REVENUE INCREASES FROM VARIOUS EXCLUSION LIMITS, FISCAL YEARS 1983-87 (In billions of dollars)[a]

Family Coverage Limit, 1983[b]	1983	1984	1985	1986	1987
$120 per month					
Income tax	3.5	6.0	7.3	8.6	10.1
Payroll tax	1.1	1.9	2.3	2.7	3.1
Total	4.6	7.9	9.6	11.4	13.2
$135 per month					
Income tax	2.8	4.9	6.0	7.2	8.6
Payroll tax	0.9	1.5	1.9	2.3	2.6
Total	3.7	6.4	7.9	9.5	11.2
$150 per month					
Income tax	2.2	3.9	4.9	6.0	7.2
Payroll tax	0.7	1.2	1.5	1.9	2.2
Total	2.9	5.1	6.5	7.9	9.4
$165 per month					
Income tax	1.8	3.1	4.0	4.9	6.0
Payroll tax	0.5	0.9	1.2	1.5	1.8
Total	2.3	4.1	5.2	6.5	7.8
$180 per month					
Income tax	1.4	2.5	3.2	4.0	5.0
Payroll tax	0.4	0.7	1.0	1.2	1.5
Total	1.8	3.2	4.2	5.3	6.5

SOURCE: CBO simulation using National Medical Care Expenditure Survey.

NOTE: Components may not add to totals due to rounding.

a. The provision is assumed to be effective January 1, 1983. These revenue increases assume that any legislation would make contributions in excess of the limit ineligible for the medical expense deduction.

b. The limits for employee-only coverage are 40 percent of the family limit. The limits are indexed by the medical care component of the Consumer Price Index.

TABLE 5. DISTRIBUTION OF ADDITIONAL ANNUAL TAX BURDEN OF $150 PER MONTH EXCLUSION LIMIT IN CALENDAR YEAR 1983, BY HOUSEHOLD (In dollars)

	All Households				Households Affected		
	Average Amount by Which Annual Contributions Exceed Cap	Additional Taxes[a] Per Household	Additional Taxes[a] Percent of Income	Additional Taxes[a] Percent of Income Taxes[b]	Percent Affected by Limit	Average Amount by Which Annual Contributions Exceed Limit	Average Additional Taxes[a]
By Annual Household Income:[c]							
$0-10,000	10	3	0.05	0.8	2	557	138
10,001-15,000	50	14	0.11	1.1	9	582	168
15,001-20,000	68	21	0.12	1.0	14	479	147
20,001-30,000	128	44	0.18	1.2	23	554	191
30,001-50,000	228	88	0.22	1.3	33	690	267
50,001-100,000	279	116	0.18	0.9	36	779	323
Over 100,000	216	108	0.08	0.3	27	804	403
By Age of Head:							
Under 45	162	62	0.15	1.3	25	652	250
45-64	192	74	0.18	1.2	27	706	273
65 or over	11	4	0.01	0.1	3	432	157
By Region:							
Northeast	127	50	0.13	1.1	20	629	245
North Central	210	81	0.21	1.4	29	724	278
South	77	29	0.09	0.6	15	531	199
West	158	61	0.17	1.1	21	745	289
All Households	142	55	0.15	1.0	21	668	257

SOURCE: CBO simulations based on the National Medical Care Expenditure Survey.

a. Tax benefits include both federal income tax reductions and the employer's and employee's share of federal payroll taxes. About three-quarters of the tax benefits are income tax reductions. State and local income tax reductions are excluded. The estimates assume that taxable excess contributions are made ineligible for the medical expense deduction.

b. Additional income taxes as a percentage of income taxes under current law.

c. Household income before taxes but including cash transfer payments, such as Social Security benefits, projected to calendar year 1983.

Alternative Ceilings

The tax exclusion limit discussed above could be altered by:

- Varying the limit on the basis of actuarial factors such as the average age of employees and location; and
- "Grandfathering" existing contributions.

Actuarial Variation in Ceiling. Among group health insurance plans, premiums do not track closely with the level of benefits. Factors such as the size of the group, the average age of its members, and local medical prices and style of practice play major roles in determining group insurance premiums. As an example, one major insurer charges $120 per month in Raleigh-Durham, North Carolina, and $240 per month in Los Angeles for the same family coverage.[11]

Many see this variability as a drawback to a uniform ceiling, since it would not target the incentives to reduce insurance coverage on those with the most comprehensive benefits. Some also object to taxing more heavily those whose premiums are high due to actuarial factors. They say that if subsidizing a moderate amount of health insurance is a federal goal, then the subsidy should take these actuarial factors into account.

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11. Personal communication.

Additional evidence on this point comes from analysis of survey data. Using a Bureau of Labor Statistics survey of employment-based plans, CBO constructed a premium index that reflected only variation in the comprehensiveness of coverage (including projected induced variation in use of care). This index deliberately excluded factors such as age, sex, and local medical care prices.

Approximately 70 percent of these plans (weighted by the number of participants) had index values between 85 and 98. But family premiums, which include the other factors, had a much wider range. The comparable percentile range of family premiums was from $57 to $170 per month.

Others, however, object to higher subsidies going to those in areas with higher medical prices, and find the uniform nature of the proposed ceiling to be desirable. Indeed, some of the area price differences reflect long-standing differences in the extent of insurance. Moreover, many oppose varying exclusion ceilings because of reluctance to set a precedent of introducing explicit regional variation into the tax code. Arguments for varying the exclusion ceiling are similar to those for varying the size of the standard deduction and exemptions by area to reflect cost-of-living differences. Many would rather not open up the tax code to explicit area variation.

One could vary the exclusion limit in an attempt to approximate more closely the degree of extensiveness of health insurance benefits. H.R. 850, for example, would do this after a transition period by basing a family's limit on the average premium paid for qualified plans in an area by persons of similar age and sex. Such a method would automatically incorporate the actuarial factors used for the groupings. A drawback would be the extensive data collection required to determine average premiums, and the difficulty of calculating taxes due when so many limits are involved.

An alternative with more modest data requirements would be to use Medicare data to adjust for geographic differences in medical care use and prices. For example, if Medicare beneficiaries in an area spent 20 percent more than the national average (after adjusting for age and sex), the tax exclusion limit for persons in that area would be set 20 percent higher than the average ceiling. Additional actuarial factors such as age could be introduced through standard tables, but this would add substantially to the complexity of calculating taxes.

Grandfathering. Some have suggested taxing only those portions of employer contributions exceeding both the set limit and the firm's rate of contribution in effect at the time of its enactment.[12] By "grandfathering" current contributions, this would avoid sudden tax increases. During the early years of such a provision, some regional and actuarial variation would therefore be introduced implicitly.

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12. The National Governors' Association's position on medical care financing adopted at its 1982 Winter Meetings supported a tax exclusion limit with a grandfathering provision.

Such grandfathering would not provide substantial relief to many persons. For one thing, the initial additional tax liabilities would be relatively small. A family receiving a $200 per month contribution in 1983 and with a taxable income of $25,000 per year, for example, would pay about $230 per year in additional taxes.[13] Also, the effectiveness of the provision would diminish quickly. Since insurance premiums per employee are expected to increase by about 14 percent per year under current policies, most of the effects of such a provision would be gone within three years.

A major drawback to grandfathering would be the delay in realizing the effects of tax exclusion limits on the medical care system. Two or three years would have to pass before incentives to alter health insurance would become substantial. Moreover, administering such a provision would be very difficult.

Opportunities to raise revenues would also be forgone. For example, grandfathering 1982 contributions would result in fiscal year 1983 revenue gains of only $1.2 billion rather than $2.9 billion, while 1984 gains would be reduced from $5.1 billion to $3.0 billion.

PERMIT TAX-FREE REBATES

Some proposals would allow employers to pay rebates to employees choosing health plans with premiums lower than the employer's contribution and would make these payments tax free. Under current law, payment of rebates other than as part of a "cafeteria" plan meeting IRS regulations may jeopardize the tax-free status of part of the benefits received by those employees not choosing the lower-cost plan. Such proposals often require employers to make fixed contributions--that is, the same contribution whichever plan the employee chooses. They also require a minimum benefit package in order to maintain encouragements for individuals to have health insurance.

Making any rebates tax free, when coupled with an exclusion ceiling, would augment the ceiling's impact on the medical care

13. --This includes the additional payroll taxes paid by the employer.

system but would reduce additions to revenue. Where employers offer a choice of plans, tax-free rebates would remove tax incentives for purchasing additional health insurance, even for employees with contributions below the ceiling. For example, an employee receiving a $140-per-month contribution for family coverage might choose a $100-per-month plan and get a $40 rebate tax free. Since the employee would have the opportunity to receive $40 in additional after-tax income in return for a $40 reduction in health benefits, the tax incentive to choose health benefits would no longer exist. Since only about one-third of employees receiving contributions would be affected by an exclusion cap, at least initially, tax-free rebates have the potential of increasing the effectiveness of the cap.[14]

The impact of tax-free rebates would be limited in that a significant proportion of employees would not have their incentives changed by the provision, and by employers' reluctance to set up choice mechanisms. Today, roughly half of employees in firms with health benefits sponsored by employers must contribute toward premiums. Under these financing arrangements, however, the equivalent of permitting tax-free rebates is already in place. Since the employee is already contributing out of after-tax income, the full savings of any optional plan with a lower premium would already go to the employee through a reduction in the required contribution. Between those in plans where employees contribute, and those receiving employer contributions exceeding a $150 limit, only 21 percent of employees with health plans would have their incentives altered by tax-free rebates.

Employers might be reluctant to set up the choice mechanisms to make use of the tax-free rebate because this approach would raise some serious short-term problems involving duplicate coverage and adverse selection. First, roughly 23 percent of families covered by employer-paid health insurance have some overlap in

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14. Tax-free rebates would, for the most part, not affect choice for those with contributions above the cap, since taxes would be paid on the excess contributions in any case. That is, the addition of the rebate feature would alter incentives only in situations where plans with premiums below the ceiling were offered.

that one or more members are covered by two employer-paid plans.[15] As long as coordination of benefits is effective, employees with duplicate coverage draw fewer benefits than other employees. Rebates would enable such employees to collect cash without significantly reducing the benefits they draw from the health plan. While this might be desirable from the perspective of equal pay for equal work, it would cost employers money.[16]

The second problem for employers would be pressure to raise contributions to health plans because of adverse selection. If the result of employee choice was adverse selection against the original plan (in other words, if employees choosing new plans were lower than average users), the premium of the original plan would increase. Employers would then have to decide whether to continue long-standing policies of paying a fixed proportion (often 100 percent) of the plan's premium, which would increase their costs, or cutting back on the proportion contributed.

In fact, the experience with contributory health plans suggests that employers would probably not initiate choices if tax-free rebates were enacted. Despite the current favorable tax climate for choice of plans in firms requiring the employee to contribute to the health benefit plan, such arrangements are not common. This record casts doubt on the likelihood that employers who pay the entire premium would offer choices if tax-free rebates were permitted.

Tax-free rebates would lead to a revenue loss, by inducing employers to increase their contributions to health plans, unless steps were taken to prevent it. A firm's response to the rebates

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15. This estimate was obtained from an analysis by CBO of the March 1980 Current Population Survey. Harold Luft, using a different technique, obtained a similar estimate. See his "Diverging Trends in Hospitalization: Fact or Artifact?" Medical Care, vol. XIX (October 1981), pp. 979-94.

16. Over time, employers could avoid an increase in costs by reducing cash compensation or their contribution to health benefits for all employees. The net result would be that the compensation package would be more attractive to dual-earner couples than before, and less attractive to others.

might range from raising the contribution to the premium for a new "super-high" option plan that few employees would choose, to not changing the plan but increasing the proportion of the premium paid by the employer.[17]

Each of the Congressional proposals that includes a tax-free rebate has incorporated provisions to reduce this revenue loss. For example, Senator Hatch's bill (S. 139) limits tax-free contributions to the premium of the highest-cost plan chosen by at least 10 percent of the firm's employees. Representative Gephardt's bill (H.R. 850) has an exclusion limit, and also would place a $42 per-month limit on the size of the rebate that would be tax free. While each provision would reduce the revenue loss significantly, neither would prevent the loss that would result if employers raised contributions toward the premium of the basic plan.

REQUIRE A CHOICE OF PLANS

Since multiple choice is so important to the HMO strategy, some have proposed requiring employers to offer a choice of plans with a fixed contribution by employers in order to be eligible for

17. Employers might increase the proportion of the premium they pay because tax-free rebates would permit them additional options to deal with divergent preferences for health insurance relative to cash among their employees. Secondary earners covered under their spouses' health insurance would rather have cash than health insurance. In order to make the compensation package attractive to both the secondary earners and the primary earners who want coverage, employers often pay only part of the premium and pay higher cash wages than they otherwise would. In this way, the secondary earners who decline the coverage get more cash while the primary earners get health insurance coverage and some tax sheltering. Under tax-free rebates, the employer could shelter more of its compensation from taxes by raising its health benefits contribution while not forcing the secondary workers to take a lot of health insurance (they would take a minimal plan and a rebate).

the tax exclusion.[18] Senator Durenberger's bill (S. 433), for example, would require a choice of at least three plans from different carriers for firms with 100 employees or more participating in health plans.

Since employers do not have much experience with multiple choice and face possible short-term costs in conjunction with it (see above), a mandate would increase the number of employees offered a choice. Such a mandate would assist HMOs and other alternative delivery systems in their marketing efforts by encouraging employers to seek them out. The extent of cost sharing in traditional insurance policies would not change much on average, however, and small employers might experience significant administrative cost increases.

This section begins with a discussion of the need for regulation to make choices meaningful--in other words, ensuring that the plans made available to employees differ appreciably and are attractive. Assuming that the choices are indeed meaningful, the section then turns to the likely impacts of a mandate. It ends by examining the possibility of divorcing health insurance from employment, an alternative that would make a wide range of choices available to employees.

Making Choices Meaningful

Ensuring that the choices offered were meaningful would require some rules about characteristics of the plans offered. The simplest requirement would be that at least one PPGP and one IPA be offered when available, as is required of firms with 25 or more employees under current law.[19] Additional HMOs could be required when available, to encourage competition among such organizations.

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18. A fixed contribution is the same for an employee no matter which plan is chosen. If the plan's premium is lower than the employer's contribution, the employee receives a rebate for the difference. It does not mean that all employees get the same contribution.

19. Section 1310 of the Public Health Service Act.

Requiring choices among traditional plans is more difficult, but probably less important because individual choice is not necessary for increased cost sharing. The Ullman bill in the 96th Congress (H.R. 5740) would have required employers to offer either an HMO or a plan with a premium below $75 per month, but the latter might have little cost sharing in low-cost areas and too much cost sharing to be attractive to many in high-cost areas. Requiring each firm to offer a plan with 20 percent coinsurance would be more effective than a premium limit but might preclude plans with a configuration of cost sharing that is more attractive to employees--for example, a large deductible but no coinsurance once it is met. Requiring different carriers (S. 433) would not ensure substantial differences among plans.

Effects of Requiring Choice

A mandate for choice among traditional plans would be most important in conjunction with permitting or requiring tax-free rebates, since choice is a prerequisite for tax-free rebates to be effective. But if an exclusion limit that was not combined with tax-free rebates was enacted, changes in an employer's single traditional plan combined with employer-initiated multiple choice would be sufficient to respond substantially to the new incentives.[20]

The fact that employers with health plans are already required to offer HMOs to their employees under current law would reduce the effectiveness of a multiple choice mandate somewhat. Requiring multiple choice would strengthen this to a degree--by putting the onus on the employer rather than on the HMO and by requiring that employees get the benefit of any lower premiums--but the effect might not be very great.

Administrative costs would increase somewhat under a mandate of multiple choice. The most expensive mandate would be one

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20. A choice mandate would have a much smaller effect on the extent of cost sharing if rebates were taxed. Multiple choice would offer some the option to increase their coverage. Without changes in tax incentives, coverage increases by some would roughly balance coverage decreases by others.

requiring different carriers. Administrative costs vary substantially with group size. If a small or medium-sized firm was required to deal with several carriers, some of the scale economies would be lost. Asking one carrier to offer both a low and a high option would be less costly than seeking two different carriers.

Variation: Permit Employees to Apply Their Employer Contribution to Any Qualified Plan

An alternative to requiring choice would be to allow employees to apply the contribution to plans not sponsored by the employer. H.R. 850 includes such a provision, and would obligate health plans to accept all applicants on an equal basis, with premiums varying only by actuarial category.

Such a provision would make a wide array of plans available to many employees, but not all of the choices would be attractive ones. In theory, all health plans in a local area would be available to all persons willing to pay the premiums. But H.R. 850, for example, would permit discounts to reflect administrative savings from group purchase. Since these administrative savings are often large, employees of a large firm might find the company's single health plan much more attractive than other plans in the locality because of the discount. Even though each employee would technically have a wide choice, outside plans would be at a substantial disadvantage.

Besides potentially expanding the range of choices, this option might improve access to insurance for those not employed, or employed by a firm without a health plan. Many persons not in a group insurance plan have difficulties obtaining individual coverage because they are presumed by insurance companies to be in poor health. Even those who are demonstrably in good health often face very high premiums reflecting the high claims experience of individual insurance policyholders. H.R. 850 would give these persons access to insurance through its open enrollment requirement.

The disadvantages of the proposal are potentially extensive adverse and preferred-risk selection, and high administrative costs. By severing the link between employment and health plans,

the employer's ability to prevent preferred-risk selection would be lost. If employees were able to apply the employer contribution to any plan, employers would have no control over the marketing practices of insurers. Moreover, some of the economies of marketing to groups would be lost. Since administrative costs for individual plans are high relative to those in large groups, substantial additional resources might be involved.

CHAPTER IV. MEDICARE OPTIONS

Medicare is the primary insurer for 29 million persons. Because the use of medical services is so high among elderly and disabled persons, the program affects a substantial proportion of hospital and physician spending. For example, Medicare beneficiaries account for over one-third of expenditures in community hospitals. Because Medicare plays such an important role in the financing of health services, many consider changing its provisions as essential to encouraging greater use of the market.

In order to include Medicare in a market-oriented policy, some have suggested creating a system of Medicare vouchers. Medicare beneficiaries could use vouchers to purchase any qualified private health plan operating in their locality. (Plans would qualify by providing minimum benefit packages and meeting other requirements such as annual open enrollment periods.) Those choosing plans with premiums lower than the voucher amount would receive the difference in cash from Medicare, while those choosing plans with higher premiums would pay the extra amounts from their own funds. Voucher amounts could vary according to the age and sex of the enrollee and relative medical spending in the locality. Beneficiaries would have stronger incentives than at present to economize on medical care.

This chapter analyzes the Medicare voucher idea, and considers some alternative Medicare options to encourage greater use of the market. First, it discusses how vouchers fit into the two strategies of containing health care costs through the market, and then considers certain difficulties in the voucher approach. Alternatives discussed include other ways to encourage greater use of HMOs by Medicare beneficiaries, and ways to expand the amount of cost sharing by Medicare beneficiaries.

THE VOUCHER OPTION

The main effect of Medicare vouchers would be to increase enrollment in HMOs, which would become much more attractive to

Medicare beneficiaries than at present. If vouchers were voluntary (the case in all legislative proposals thus far), they would increase cost sharing by only a limited amount because of the problems private insurers would face in competing with Medicare. Vouchers would have a relatively minor impact on Medicare outlays unless they were mandatory, in which case savings could be substantial.

The Potential of Voluntary Vouchers

Vouchers would further the HMO strategy by establishing incentives to join HMOs having lower costs than fee-for-service medicine. Under current law, Medicare enrollees have little financial incentive to join such HMOs since most of them are reimbursed by Medicare on a fee-for-service basis; much of the savings from lower rates of hospital use therefore accrues directly to Medicare, not to the beneficiary. Under a voucher system, the Medicare payment would not be based on the experience of the particular HMO, but on Medicare's experience in the fee-for-service system in the same locality. To the extent that an HMO's premium was lower than the voucher amount, the beneficiary would keep the difference.

Vouchers would encourage enrollment in HMOs by easing their marketing problems as well. In any locality, an annual listing of the HMOs that qualify for vouchers, their benefits, and their premiums, would reduce their costs of marketing to the Medicare population in that area--costs that might otherwise preclude substantial efforts to enroll this population. Other alternative delivery system health plans would also benefit from this marketing opportunity.

Cost sharing might be further increased if enrollees were given a cash refund in return for accepting additional cost sharing. Under current law, Medicare beneficiaries willing to pay additional premiums to reduce their cost sharing can do so by purchasing private health insurance that supplements Medicare--but those wanting to convert some of their Medicare benefits to cash cannot do so. The voucher proposal would provide such an outlet.[1]

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1. Some voucher proposals, such as H.R. 4666, introduced by Congressmen Gradison and Gephardt, would permit vouchers to be used to purchase health plans with benefits at least equivalent to Medicare's. Proposals such as these would work only through the HMO strategy.

Problems with Voluntary Vouchers

Medicare vouchers would have some serious problems. Private plans might have difficulty in competing with Medicare. Vouchers might also stimulate adverse and preferred-risk selection. These problems would be more severe in the case of traditional insurance plans with greater cost sharing than in the case of HMOs.

Competitive Problems. Private insurers might have cost disadvantages in competing with Medicare. First, private insurers have selling costs while Medicare does not, and the costs of selling insurance to individual aged and disabled persons could be very high. Administrative costs (other than claims processing) for individual health insurance policies average about one-third of their premiums today. Such costs could be reduced substantially, however, if the federal government played an active role in structuring the choice system. This would probably require limiting the number of traditional insurers offering plans in an area, standardizing benefit packages, conducting the enrollment process, and adjusting Social Security checks for premiums and rebates. Some advocates of vouchers would shy away from such an activist role for government, however.

The costs of private insurers would also be higher for another reason: they must often pay providers at higher rates than Medicare. The problem is most serious for hospital care, where Medicare, with few exceptions, does not permit additional charges to the patients. Data from the Health Care Financing Administration indicate that Medicare determinations of allowable hospital costs averaged 19 percent less than charges in 1978.[2]

The competitive disadvantage of private insurers is particularly acute in enrolling beneficiaries who want a more comprehensive benefit package than Medicare provides. Today such persons may purchase private policies to supplement Medicare, and more than half of them do so. These purchases of supplemental policies are implicitly subsidized by Medicare, however. The reduction in

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2. A few Blue Cross plans may not face this problem of paying hospitals at higher rates than Medicare. They sometimes have discounts comparable to those of Medicare.

cost sharing that results from purchasing such plans induces higher rates of use of medical services, but Medicare pays a large proportion of the costs of the additional use.[3] If a private insurer was to offer a more comprehensive benefit package as a substitute for Medicare plus a supplemental plan, the premium would have to include the entire cost of the additional use of services.

These competitive problems may explain the lack of enthusiasm shown by private insurers for Medicare vouchers. Given the magnitude of the disadvantages, opportunities for profitable new business would be limited. Indeed, the only way to profit might be through selective marketing (discussed further below). Reputable insurers would not find the prospect appealing, especially since less reputable competitors might move in.

These competitive problems would affect HMOs, but to a lesser degree than traditional health insurers. First, many HMOs either have their own hospitals or obtain discounts through bulk purchasing of hospital care, reducing Medicare's advantage. Second, HMOs offer more than just a different benefit structure than Medicare. Their alternative delivery systems emphasize comprehensiveness of benefits and coordination of services that might be attractive to some Medicare enrollees on other than financial grounds.

Adverse and Preferred-Risk Selection. Vouchers could lead to substantial adverse and preferred-risk selection, and thus increase rather than reduce federal outlays. Again this would be less serious for HMOs than for traditional private plans.

Persons choosing to use vouchers to purchase traditional private health insurance policies would likely be lower users than those remaining in Medicare, for two reasons. First, private plans would be more attractive to those interested in less extensive benefits than to those seeking more extensive benefits. Second, insurers would have strong incentives to market selectively in order to obtain the best risks.

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3. For example, the supplemental plan may pay the 20 percent coinsurance for physician services. But if physician visits increase by 20 percent because of the extra insurance, Medicare pays 80 percent of reasonable charges for the additional visits--or, in this case, 40 percent of the full costs of the additional coverage.

Vouchers would be quite unattractive to persons seeking traditional plans with more comprehensive benefits than Medicare because private supplements are already available--implicitly subsidized by Medicare (see footnote 3 above). In most cases, Medicare plus the supplemental plan would have a lower price than a private plan obtainable with a voucher.

Since some persons seeking less extensive coverage might find vouchers attractive, while few seeking more extensive coverage would, the adverse selection would tend to be to the disadvantage of Medicare. In other words, the costs to the federal government of the vouchers for persons opting out of Medicare would exceed what their Medicare benefits would have cost had they remained, so federal spending on the program would increase.

In the case of HMOs, adverse selection would be a very different phenomenon, but the direction, at least initially, would be the same. Since HMO benefits would tend to be similar to those in Medicare, there would be no chance for low users to gravitate toward less comprehensive plans. But persons switching to group-practice HMOs tend to be low users (see Chapter II). Even if the difference eroded over time, federal outlays consistently could be higher than under current policies, especially if large numbers of beneficiaries switched to HMOs each year.

Finally, preferred-risk selection could also be a serious problem. As discussed in the section on individual choice in Chapter II, it would pay insurers to enroll persons likely to be low users. Preventing this by regulation would not be feasible because of the difficulty of proving intent.[4] The net result would be a transfer from Medicare to those insurers who succeeded in such endeavors. The problem could be reduced significantly by a highly structured voucher program. To the extent that the federal government limited the number of plans, did the marketing itself, and standardized benefits, most opportunities for preferred-risk selection would be eliminated.

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4. Insurers could, for example, target marketing campaigns to areas having populations that are relatively young and well-off.

Mandatory Vouchers

Some of these problems might be dealt with by making vouchers mandatory, at least for those newly eligible for Medicare. Medicare would provide only a set amount of funds toward the purchase of a qualified health plan, not reimbursements for covered medical care services.

Mandatory vouchers would eliminate the problems that private health plans would have in competing with Medicare. They would also avoid an increase in federal outlays caused by adverse and preferred-risk selection, since voucher amounts would not be affected by such developments.

On the other hand, mandatory vouchers would have several negative features. They might channel a significant amount of resources into the process of choice among plans. The selling costs discussed above would be included in the premiums paid by all of those eligible for Medicare. The voucher amount would either reflect the selling costs directly--thereby raising federal costs for the same coverage--or enable beneficiaries to buy less coverage for the same federal cost. Moreover, adverse and preferred-risk selection might result in a significant transfer of resources from the high users to the low users. Structuring the voucher system would reduce these problems considerably, but at the sacrifice of some competition. In addition, Medicare would lose its ability to use its purchasing power to drive a hard bargain with providers on behalf of taxpayers.[5]

Perhaps more important than the pros and cons outlined above is the change in the nature of the Medicare entitlement that would be associated with mandatory vouchers. Under current law, persons eligible for Medicare are entitled to reimbursement for a defined set of medical services when needed. As the cost of purchasing these services has soared, federal reimbursements have increased automatically. Under a mandatory voucher, the entitlement would be not to reimbursement for services but to a certain amount of money to be applied toward the premiums of qualified private health plans.

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5. As discussed earlier in the chapter, Medicare pays hospitals considerably less than their charges. To the extent that charge-paying insurers replaced Medicare under a mandatory voucher system, these gains to taxpayers would be lost.

The entitlement might be set equivalent to the current cost of the service entitlement, but it could be set lower. For example, some have proposed basing the voucher on current spending in Medicare and indexing it by the GNP deflator. If the GNP deflator increased by six percentage points per year less than per capita spending in Medicare, as is projected, the voucher amount would soon be substantially less than the cost of the services included in Medicare today. To the extent that beneficiaries enrolled in plans whose premiums grew more slowly than Medicare spending, the problem would be reduced. On the other hand, the voucher amount could be indexed by a more generous factor so as not to affect the level of federal support for health services for Medicare beneficiaries, or a compromise might be found between the need to reduce the budget deficit and the needs of the elderly.

OTHER MEDICARE OPTIONS

A number of other options are available that could increase the role of market forces in Medicare. Reforms in the method of reimbursing HMOs could supply financial incentives to increased enrollment. Cost sharing could be increased several ways--by applying a surcharge to the premiums of supplemental insurance policies, by offering a choice of plans within Medicare, or by altering the Medicare benefit structure.

Reimburse HMOs on a Capitation Basis

Medicare could reimburse HMOs on a capitation basis instead of the present fee-for-service basis. For example, under H.R. 3399, a bill introduced by Congressman Waxman and reported by the Committee on Energy and Commerce, and under S. 1509, introduced by Senator Heinz, Medicare would pay HMOs an amount per enrollee equal to 95 percent of what Medicare spends on similar persons in the area who obtain care through the fee-for-service sector. If the HMO's costs were lower, the excess would have to be applied to the cost of services not included in the Medicare benefit package.

This option is broadly similar to the voucher system. Both would pay a fixed amount and establish a potential financial reward to those enrolling in efficient HMOs. Both initially would tend to increase Medicare outlays as a result of adverse and preferred-risk selection and by rewarding those beneficiaries

already enrolled in efficient HMOs. (If an HMO has costs 20 percent below fee-for-service costs, for example, Medicare now gains most of the savings for current enrollees. Under H.R. 3399, Medicare's gain would be limited to 5 percent of fee-for-service costs.)

The H.R. 3399 approach has one possible advantage over the voucher system in that it would limit opportunities to opt out of Medicare to those enrolling in HMOs. Since consumer choice is more important to the HMO strategy than to the cost-sharing strategy, this limitation to encouraging HMO enrollment might be desirable. A smaller number of Medicare beneficiaries would be involved and the extent of adverse selection would probably be less, so that the increase in federal outlays would be substantially smaller than under some voucher proposals. Of course, restricting the alternatives to enrollment in HMOs would require that they be defined for the purposes of such a program. A tight definition of HMOs would exclude some alternative delivery systems and thus perhaps stifle some innovation.

Encourage More Cost Sharing

Given the shortcomings of vouchers in furthering the cost-sharing strategy, the following options might be considered.

Tax Premiums for Supplemental Policies. Earlier in the paper, the mechanism was described by which the purchase of private insurance to supplement Medicare increases federal outlays and reduces cost sharing. A tax equal to the amount of additional costs to Medicare--about 35 percent of the private plan's premium--could alleviate this problem. The proceeds of such a tax might be dedicated to the Medicare trust funds

Such a tax would have two major effects. First, cost sharing would increase. With the implicit subsidy from Medicare to purchasers of supplemental plans offset by the tax, some participants would decide that supplemental coverage was not worth the price and would instead pay deductibles and coinsurance out-of-pocket at the time that services are used.

Second, it would reduce federal costs for Medicare. Some of the savings would come from surcharge receipts while the remainder would come from lower rates of Medicare claims by those deciding

to discontinue their supplemental policies. In all, the federal deficit would be reduced by $2.5 billion in fiscal year 1983 and by $17.7 billion over the 1983-1987 period.

This option would lead to more equal government aid for all participants by requiring those with private supplemental coverage to bear the additional costs they impose on the Medicare system. Elderly and disabled persons with the lowest incomes would not be affected because their deductibles and coinsurance are paid by Medicaid. But by discouraging the purchase of supplemental coverage, some who would otherwise have purchased it would face difficulties in meeting out-of-pocket costs during a year of unusually high medical expenditures. Supplemental plans that provide only catastrophic coverage might be excluded from such a tax.

Offer a Choice of Plans within Medicare. Medicare could develop a series of options with different benefit structures. Persons choosing an option less comprehensive than the current Medicare benefit structure would get a cash payment reflecting Medicare's claims experience with the option. Those selecting a more comprehensive option would pay an additional premium. These cash payments and additional premiums could vary by age, sex, location, and other relevant actuarial factors.

Such a choice would probably increase the average degree of cost sharing. Those seeking less cost sharing can already purchase supplemental policies at favorable premiums, so the number of persons choosing less cost sharing (either through a new Medicare option or by continuing their supplemental policy) would probably not increase much from current levels. In contrast, those seeking more cost sharing, who have no opportunity to do so today, would be more likely to change plans.

This option would have three advantages over Medicare vouchers as part of a cost-sharing strategy. First, it would economize on resources devoted to selling health plans, since an annual offering by Medicare might be far less costly than marketing campaigns by competing private insurers. Second, preferred-risk selection (but not adverse selection) would be eliminated, since Medicare would offer all the options. Third, it would retain the hospital discount that Medicare has achieved through its purchasing power.

Medicare outlays could still increase, however, if the entitlement to the current array of services was maintained, but those leaving the basic plan were lower than average users. Taxing premiums for supplemental policies at the same time would make such an increase in outlays less likely, since switching from basic Medicare to other plans would be attractive to higher than average users as well as lower than average users. This option would not increase enrollment in HMOs or other alternative delivery systems, but that could be mitigated by combining it with a voucher restricted to HMOs or with capitation reimbursement of HMOs.

Restructure Medicare Benefits. A more direct approach to increasing cost sharing would be a change in the Medicare benefit structure. Under the Medicare Hospital Insurance (Part A) program, patients pay a deductible equal to the estimated average cost of one day's hospitalization--$260 in calendar year 1982 and about $300 by 1983. They also pay coinsurance charges (generally 25 percent), but only after 60 days of hospitalization for a particular spell of illness. Consequently, very few Medicare patients--about 0.2 percent--pay hospital coinsurance in any year.

In addition to the first-day deductible, beneficiaries could be required to pay 10 percent of the amount of the deductible for each of the next 30 days of a hospital stay in each calendar year--about $30 per day in 1983. Medicare would cover all charges in excess of any stay beyond 31 days, or of separate stays totaling more than 31 days in a year, thus improving coverage for participants with unusual hospitalization needs. Enrollees would pay only one $900 deductible, no matter how many times hospitalized in a year.

This option would implicitly set a maximum yearly out-of-pocket individual liability for hospital costs of about $1,200 for 1983. The Medicaid program would continue to pay the coinsurance costs for those elderly and disabled persons enrolled in both programs. Enactment of this proposal would save $1.1 billion in fiscal year 1983 and over $7 billion during the 1983-1987 period.

Coinsurance provisions would limit federal expenditures in two ways. These provisions would make the patients responsible for part of the costs, directly reducing required federal outlays. In addition, hospital patients who pay part of the cost of

their care would probably become increasingly concerned about holding down medical expenditures, limiting both their admissions and lengths of stay. The latter impact would be reduced significantly to the extent that private supplemental plans were revised to cover the new coinsurance charges. Research does not indicate whether increases in Medicare cost sharing would increase or decrease the proportion of beneficiaries who purchase supplemental plans.

Under this option, out-of-pocket costs would rise substantially for the majority of elderly and disabled who are hospitalized. Only a small number of Medicare participants would benefit from the improved catastrophic coverage in any one year, whereas the potential $1,200 in cost-sharing represents about 15 percent of average per capita income for the elderly. In addition, since physicians' fees are currently subject to coinsurance under Part B of Medicare, the burden of an illness requiring hospitalization could rise to well over $1,200. Moreover, persons ineligible for Medicaid who could not afford the cost sharing might forgo some needed medical care.

This conflict between the need to economize on the use of medical services and the burden that cost sharing would place on low-income beneficiaries might be resolved by varying coinsurance rates with income. For example, low-income persons could be assessed 5 percent of the amount of the deductible while all others could pay 15 percent.

The administrative difficulty of varying coinsurance rates by income would depend on how refined were the criteria used to determine who was entitled to the lower rates. The simplest would be based on the level of Social Security benefits. Beneficiaries who were hospitalized and whose monthly benefit was below a certain amount could apply to their Social Security office to obtain the lower coinsurance rate.

Some might consider such a criterion to be inequitable, since among persons with low Social Security benefits some might have high incomes from other sources. A second criterion might be added--for example, that low Social Security benefits and low adjusted gross income be required to get the low coinsurance rate. This would be feasible, though more complicated than the first.

Restricting income-testing to hospital benefits, as in this option, would keep the administrative workload down. Only 22 percent of Medicare beneficiaries have a hospital stay during a calendar year.

Although this option would make patients sensitive to the quantity of medical care used, it would not directly encourage use of lower-cost facilities. A different option could be designed to give patients incentives to use less expensive hospitals. Medicare hospital benefits for days 2 through 31 could be based on average per diem costs in hospitals in an area, for example. Patients would then be liable for the difference between that amount and the hospital's allowable cost. Patients in low-cost hospitals would therefore pay less than those in hospitals with higher than average costs.

A technical problem requiring resolution is that of differentiating between patients requiring many ancillary procedures per day and those requiring few. Unless the Medicare payment and the additional amount that patients were liable for were varied according to diagnosis, hospitals would be given a powerful incentive to admit only patients requiring few services. Basing cost sharing on services ordered rather than on days of care might alleviate this problem.

APPENDIX. INDIVIDUAL CHOICE

Many of those who favor increased use of the market in medical care envision a process of "fair economic competition" in which consumers would choose among health plans.[1] Employers contributing to health plans, and Medicare through a voucher program, would pay the same amount regardless of the plan selected, so that consumers would be rewarded for selecting plans with low premiums. This mechanism is seen as fostering competition among plans, and opening up markets for new plans that are more cost-effective.

While individual choice has the potential to stimulate competition among health plans, it also encounters a number of problems that could seriously impair its effectiveness. These include:

- o Adverse and preferred-risk selection;
- o Administrative costs; and
- o Contract complexity.

This appendix discusses each of these problems.

Whatever the merits of individual choice, one should note that it is not essential in using the market to contain medical care costs. Under the cost sharing strategy discussed in Chapter II, insurance benefits could be altered without individual choice. Employers could shift some of their payments for health insurance to cash or other fringe benefits, and cost sharing in Medicare could be increased. While individual choice is required for the HMO strategy, the problems raised tend to be less severe when the choice involves HMOs.

1. See, for example, Alain C. Enthoven, Health Plan (Addison-Wesley, 1980).

ADVERSE OR PREFERRED-RISK SELECTION

When consumers choose among health plans, the result is unlikely to approximate that of a random sorting. Consumers will be likely to take into account their expected rate of use of services; while insurers, for their part, are likely to attempt to enroll a disproportionate number of those they expect to be low users of services. The former process is often referred to as adverse selection, while the latter is called preferred-risk selection, both terms reflecting the perspective of insurers. Each process results in a shift of resources from those expecting to be high users to those expecting to be low users, and could diminish the effectiveness of individual choice in spurring competition. A major issue is how much selection is tolerable in order to gain the benefits of individual choice, and whether selection could be kept below this amount.

Adverse Selection

Adverse selection shifts resources among individuals by changing the premiums of experience-rated health plans. Those who choose plans enrolling people who use less medical care than average gain from a low premium reflecting that pattern of use, while those choosing plans that enroll people who use more medical care than average lose by paying a higher premium than otherwise.

Consider a hypothetical example of an employer-sponsored plan that costs $200 per month per family and covers all acute medical care in full (see Appendix Table 1). The employer introduces a low-option plan that pays 80 percent of all acute medical bills and pays a rebate to those choosing this plan equal to the amount by which its premium is less than $200 per month. If a random selection of the firm's employees choose the low option plan, its cost will be $139 per month and the rebate $61 per month.

But those choosing the low-option plan will likely have been lower-than-average users of medical services. If their spending under the high-option plan would have been 20 percent less than the average, the premium for the low-option plan might fall to $114 per month, increasing the rebate to $86 per month. The premium for the high-option plan would increase to about $237, requiring a contribution by employees of $37 per month unless the employer chose to increase its payment by this amount.

APPENDIX TABLE 1. HYPOTHETICAL EXAMPLE OF CHOICE WITH ADVERSE SELECTION

	No Choice	Choice with Random Selection	Choice with Adverse Selection
High Option			
Premium	$200	$200	$237
Rebate	0	0	-37
Low Option			
Premium		139	114
Rebate		61	86

NOTE: The following assumptions underlie this example:

-- Administrative costs are $15 per month.

-- The high-option plan has full coverage; the low-option plan pays 80 percent of bills.

-- Coinsurance in the low-option plan induces a 16 percent reduction in medical spending.

-- Half of the employees choose the low-option plan; their previous rate of use was 20 percent less than average.

Such a shift in resources from those choosing plans with relatively high users to those choosing plans with low users reflects a segmentation of the insured population. In group insurance without individual choice, those expecting high rates of use and those expecting low rates of use are pooled together and pay the same premium. In a sense, the low users subsidize the high users. But under individual choice, the high and low users can assign themselves into different groups, reducing the magnitude of the internal subsidy.

Many consider adverse selection undesirable because of these transfers, but others feel differently. The former group champions the current internal subsidy as socially useful, spreading the burden of high medical costs. The internal subsidy represents a type of insurance against chronic poor health, a spreading of risks that are long-term as well as risks occurring during the policy year. Others object to internal subsidies that do not come directly from government policies, maintaining that only through explicit government action should resources be directly transferred from one individual to another.

In situations where the choice is between a traditional insurance plan and an HMO, adverse selection is a different phenomenon. Here the benefit structures are often similar, so the pattern of selection discussed above does not apply. Selection is more likely to be dominated by the differences between persons willing to change their physician and those who are not, since enrolling in a PPGP-model HMO generally requires such a change. Those willing to change will tend to be relatively low users at the time of change. Once the PPGP enrollments begin to stabilize, the phenomenon may decay--that is, it will probably be more important for new PPGPs than for established ones.[2]

Still another case would be the choice between a high- and low-option traditional insurance program and an HMO. The high-option plan would probably attract those with the highest rates of use, with the HMO attracting the next highest group and the low-option plan those with the lowest expected use. Some advocates of the HMO strategy are particularly fearful that HMOs might attract a relatively high-risk population in those circumstances.

Adverse selection under individual choice may, if it is too pronounced, interfere with competition among health plans. If premium differences among plans were influenced more by adverse selection than by differences in efficiency, consumers would have no ~~way of focusing~~ on the latter ~~in making~~ their choices. This in turn would remove competitive pressure on plans to contain medical costs.

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2. Evidence on this point with respect to Medicare enrollees is discussed below.

Preferred-Risk Selection

The effects of preferred-risk selection are very similar to those of adverse selection. When insurers market to consumers they think to be the lowest users, they segment the market in the same way that adverse selection does, so that the internal subsidy between high and low users is reduced. Under individual choice of plans, opportunities for preferred-risk selection could lead insurers to channel their energies into marketing schemes designed to select good risks rather than into reducing the cost of medical care.

Magnitude of the Problem

Adverse selection and preferred-risk selection would be present under any scheme of individual choice, but their magnitude is difficult to predict. In the limited experience with individual choice, the methods available to control selection were, for the most part, not employed. This section briefly reviews the experience of the Federal Employees Health Benefits Program (FEHBP) and some Medicare demonstrations that offered opportunities to enroll in an HMO with a fixed payment to the HMO by Medicare.[3]

The FEHBP has offered a choice of health plans to federal employees and their families for many years. The federal government makes a proportional rather than a fixed contribution, but since the contribution is capped it is, in effect, fixed for many of the major plans. FEHBP has apparently experienced significant adverse selection, though not enough to put the leading high-option plan out of business or (until last year) to cause much concern about it in the Congress.

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3. The market for individual health insurance policies might also be studied, but it is not a good prototype for the models of individual choice advocated in the Congress. A major way that insurers reduce adverse selection (or engage in preferred-risk selection) is by rejecting applicants in poor health and excluding medical expenses associated with pre-existing conditions. This would not be an acceptable practice for group insurance policies.

Two types of evidence suggest that the Blue Cross-Blue Shield high-option plan has attracted higher than average users. First, utilization rates in the plan are much higher than rates in other government-wide plans, with the differences in most cases too large to explain by differences in cost sharing. The overall hospital utilization rate by enrollees was 9.4 percent in 1979, compared to 7.6 percent in the Blue Cross low-option plan and 7.8 percent and 7.2 percent in the two Aetna plans.[4] For maternity care, 1.6 percent of the Blue Cross high-option enrollees had claims, compared to 1.0 percent in the low-option plan, and 0.6 percent and 0.5 percent in the two Aetna plans.

The second type of evidence concerns patterns of plan-switching out of the Blue Cross high-option plan into other FEHBP plans. Specifically, those switching out of the plan at the end of 1977 had claims for that year 36 percent lower than the average for the plan.[5] Such persons accounted for only 2 percent of Blue Cross high-option enrollees, however. Those switching into the plan from other FEHBP plans in late 1977 had 1978 claims experience close to the average for the plan.

Inference from the FEHBP experience is difficult, however. For one thing, the range of choice is relatively limited because, with the federal government paying 75 percent of the premium up to a ceiling, little incentive exists to enroll in a plan with a premium below the ceiling. Until 1982, when the federal government demanded benefit reductions in plans, no plans had extensive cost sharing. The inclusion of federal retirees in the plans, some with Medicare coverage (which pays first) and some without, also makes inference difficult since the circumstance is unusual.[6]

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4. U.S. Office of Personnel Management, Federal Fringe Benefit Facts 1980, Table D-5.

5. When mental health claims were excluded, the pattern remained, with persons switching out having claims 33 percent below the average. For more detail on this analysis, see the forthcoming Congressional Budget Office paper on catastrophic illness.

6. For additional discussion of differences between FEHBP and the individual choice model advanced by "pro-competition" advocates, see Marsha Gold, "Competition within the Federal Employees Health Benefits Program: Analysis of the Empirical Evidence," November 1981.

Medicare HMO enrollment demonstrations indicate that beneficiaries choosing HMOs tend to be lower users than their counterparts who decline the opportunity. Medicare has contracted with a number of HMOs on a demonstration basis to reimburse them for services provided to Medicare beneficiaries on the basis of Medicare's claims experience with persons of similar age, sex, institutional status, and location.[7] With the exception of one plan, Medicare beneficiaries enrolling in HMOs had used fewer than average services during the four years prior to joining, with the difference averaging about 20 percent.[8] In one of the studied HMOs, enrollees had slightly higher than average use of services prior to enrollment but this site, unlike the others, did not require enrollees to change physicians. Such selection against Medicare and in favor of the HMOs could erode somewhat over time, but many years of continued monitoring of these demonstrations will be necessary in order to determine this.

Minimizing the Problem

Methods are available to reduce the extent of adverse and preferred-risk selection. Adverse selection in choices between high and low options could be reduced by varying rebates or employee costs according to factors such as age, sex, family size, and location. Those expected to be higher users could be given larger rebates for joining plans with lower cost-sharing premiums, for example. If variation in rebates was based on actuarial factors, this could reduce the role of these factors in selection.

While varying rebates by these factors would reduce adverse selection, a significant amount would still remain. A recent analysis by CBO has shown that prior use is a very important determinant of future use of medical services. Among participants in the Blue Cross-Blue Shield high-option plan under FEHBP,

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7. HMOs in the demonstration were reimbursed at slightly less than the Average Adjusted Per Capita Cost (AAPCC), with the percentage of AAPCC varying by site.

8. Paul W. Eggers, "Pre-Enrollment Reimbursement Patterns of Medicare Beneficiaries Enrolled in 'At-Risk' HMOs," Health Care Financing Administration Working Paper OR-31, September 30, 1981.

families whose claims exceeded $5,000 in a calendar year (1982 dollars) had claims in the subsequent year 190 percent above the average claim of $1,203. Part of this difference reflects demographic factors such as age and family size, but when these are removed, families exceeding this threshold still had subsequent-year expenses almost double the average.[9] This pattern of high longitudinal correlation in use has also been found among the elderly.[10]

Further reduction in adverse selection would probably require taking health status into account. Prior claims might be used as a proxy, but this would have problems since those with relatively high use in the recent past would have to be given larger rebates to enroll in plans with low premiums. Besides causing administrative problems, such a policy would provide an incentive to use more medical services.

Reducing preferred-risk selection would be easier, but it would impose a cost. An employer offering a choice of plans could use the same insurer to offer high- and low-option plans, thus eliminating the incentive for insurers to engage in such practices. This might be at the expense of some of the innovation that advocates of market-oriented strategies are counting on, however. Alternatively, the employer could use different insurers but monitor their marketing practices. Reducing preferred-risk selection would be much more difficult under the Medicare voucher, which could not be limited to a single insurer, because monitoring marketing activities would be much more difficult.

ADMINISTRATIVE COSTS

A system of individual choice would inevitably have higher administrative costs than the current system, depending on the organization used. If an employer offered an HMO, its administrative costs would probably be very small, at least if the firm was

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9. This analysis will be described in the forthcoming CBO study on catastrophic illness.

10. Noralou P. Roos and Evelyn Shapiro, "The Manitoba Longitudinal Study on Aging: Preliminary Findings on Health Care Utilization by the Elderly," Medical Care, vol. XIX, no. 6 (June 1981), pp.644-57.

large. FEHBP has low administrative costs even though it offers a relatively large number of plans to employees. On the other hand, selling insurance to individuals could be very expensive. Administrative costs for individual policies are on the order of 35 percent of premiums, as compared to less than 5 percent for very large group policies and 10 percent for all group insurance. The more "open" the competition among insurers, the higher the administrative costs are likely to be. To assess the merits of a greater use of individual choice, the additional costs must be subtracted from the gains in medical care efficiency.

CONTRACT COMPLEXITY

Insurance contracts are complex documents. Their language of individual deductibles, family deductibles, coinsurance, limits, fee screens, exclusions, and the like is difficult for many people to understand. Group insurance lifts some of the burden because a professional--the firm's employee benefits manager or the union's counterpart--does the buying.

Under individual choice, however, the consumer becomes the purchaser of health insurance, and must have a greater understanding of the plans. In fact such understanding is necessary if individual choice is to be successful in stimulating competition.

Employers offering choice could ease the information problem by making the benefits of different plans as similar as possible. For example, high and low options could be designed so that they differ only by the size of the deductible or the coinsurance rate, or HMOs could be pressured by their group clients to offer the same benefit package--possibly one that resembles that of the high-option plan.

Under a Medicare voucher system, the problem could be more difficult. Standardized options might be opposed on the grounds that they are highly regulatory and would stifle innovation. But to permit a large degree of variation among plans might prevent the elderly from making intelligent choices and subject them to heavy advertising campaigns.